

75F0012
c.3

Employment Equity Data Program

Programme statistique sur l'équité en matière d'emploi



XV USER'S MANUAL

(1.30)

STATISTICS CANADA
STATISTIQUE CANADA

253 30 1995

LIBRARY



Statistics
Canada

Statistique
Canada

Canada

XV USER'S MANUAL

March 1995

(1.30)

The Interdepartmental Working Group on Employment Equity Data wishes to thank the Data Dissemination Division of Statistics Canada for the development of this software.

Français au verso

TABLE OF CONTENTS

| | | |
|------------|--|-----------|
| 1.0 | SYSTEM OVERVIEW | 5 |
| 2.0 | SYSTEM INSTALLATION | 5 |
| 3.0 | GETTING STARTED | 6 |
| 4.0 | HOW TO USE XV | 6 |
| 4.1 | SELECTION MENU | 6 |
| | 4.1.1 Select a Table | 6 |
| | 4.1.2 Select a View | 7 |
| 4.2 | RETRIEVAL MENU | 8 |
| | 4.2.1 Browse data | 9 |
| | 4.2.2 Output selected data to file | 9 |
| | 4.2.3 Retrieve selected data into worksheet | 10 |
| | 4.2.3.1 Retrieve data into worksheet | 10 |
| | 4.2.3.2 View Worksheet | 14 |
| | 4.2.3.3 Manipulate data in Worksheet | 15 |
| | 4.2.3.4 Write Worksheet to a File | 15 |
| | 4.2.3.5 Read a Comma-Delimited File into Worksheet | 16 |
| | 4.2.3.6 Print Worksheet | 16 |
| | 4.2.3.7 Alter Display Options | 16 |
| | 4.2.3.8 Erase all data in worksheet | 17 |
| | 4.2.4 Retrieve Table Description | 17 |
| 4.3 | EXIT MENU | 18 |
| 4.4 | CONFIGURE MENU | 19 |
| | 4.4.1 Designate a new Drive/Path for data | 19 |
| | 4.4.2 Change Printer Port | 20 |
| | 4.4.3 Change Graphics Resolution | 20 |
| | 4.4.4 Change # of Decimals in displays | 20 |
| | 4.4.5 Change Column Width for displays | 21 |
| | 4.4.6 Change symbol used to denote N/A | 21 |
| | 4.4.7 Stub Width (Print-Image output) | 21 |
| | 4.4.8 Make current View the default | 21 |
| | 4.4.9 Save current Options | 22 |
| 5.0 | GLOSSARY OF TERMS | 23 |

1.0 SYSTEM OVERVIEW

This document provides an introduction to the standalone version of the XV Software. The XV Software, designed by the Dissemination Division of Statistics Canada eases the burden of extraction, manipulation and analysis of data. It facilitates the selection and display of data from multi-dimensional arrays (cross-tabulations). XV provides a simple means of:

- selecting, displaying and printing subsets of the data from dimensions and categories of a selected table;
- converting the data into a form that can be used by other software packages;
- creating new data items from arithmetic combinations of existing items.

To access the data stored on the XV diskette, the following steps are involved:

- loading the software;
- selecting a table and view;
- selecting the dimensions and categories desired;
- displaying and/or processing the data retrieved.

This software can be installed and run in the DOS environment on any IBM-compatible microcomputer.

2.0 SYSTEM INSTALLATION

Before the XV software can be installed, make sure you have at least 5MB of free disk space on your hard disk.

NOTE: The XV software files are in compressed format, they must be decompressed before you can run the software.

To install XV,

1. Insert the diskette into drive A or B.
2. At the DOS prompt
 - a) type **MD EE** and press **<Enter>**
 - b) type **CD\EE** and press **<Enter>**
 - c) type **copy a:*.* or b:*.*** and press **<Enter>**.
3. To decompress the files, type **(name of file)** at the DOS prompt.

3.0 GETTING STARTED

Access the directory where the XV software is stored (CD\EE).
At the prompt type: **XVM <Enter>**.

The next screen will ask you:

English/Français? E/F?

Type the letter "E" if you want the English version or "F" if you want the French version.

The Terms and Conditions of the Limited Use Data Product License Agreement are displayed.
You are prompted with:

Do you accept these terms? Y/N?

If you type "Y", a note explaining the reliability of the data for certain tables appears. Hit **<Enter>**. The XV Main Menu will appear.

If you type "N" or press any other key, you are returned to the DOS prompt.

4.0 HOW TO USE XV

The following is the main menu once you access XV:

| | | | | |
|---------------|-----------------|-------------|------------------|----------------|
| Select | Retrieve | Exit | Configure | F1=HELP |
|---------------|-----------------|-------------|------------------|----------------|

Use the arrow keys to highlight the option you wish to choose and press **<Enter>**.

4.1 SELECTION MENU

There are two options in this Menu:

Select a Table
Select a View

4.1.1 Select a Table

To access the list of tables, choose the "Select a Table" option from the Selection Menu. XV lists the available tables.

Below the list of tables, the system displays a short description of the table on which the cursor is positioned. A more complete description of the table's contents is displayed at the bottom of

the screen.

Select the desired table by using the arrow keys and press <Enter>.

4.1.2 Select a View

Select this option and press <Enter> or just press V, the following screen will appear:

| POP x PROVINCE x AGE x SEX x HLOS x MFS | |
|---|--------|
| Which dimension will form the ROWS? | |
| 0 - Period [CensusYr] | (1) |
| 1 - PROVINCE | (13) |
| 2 - AGE | (6) |
| 3 - SEX | (3) |
| 4 - HLOS | (14) |
| 5 - MFS | (13) |
| 6 - Quantifier | (1) |
| Selection ==> 0 | |
| PgUp PgDn Home End Press + for full text | |
| F1 - Help | |

The numbers in the brackets following the dimension descriptors indicate the number of observations or categories to be found in that dimension.

Use the arrow keys to select option and press <Enter> or just enter the appropriate number.

Once you finish selecting ROWS, the cursor will return to the first non-marked dimension. Repeat the process for the COLUMNS and the WAFER dimensions.

Suppose you select 'PROVINCE' (ROW), 'SEX' (COLUMN) and 'AGE' (WAFER).

After these 3 choices have been made, a new screen will appear:

The following category will be selected from the remaining dimensions:
(Change using Keyped or hit <ENTER> to proceed)

| | |
|------------|----------------|
| [4] HLOS | ▶ (1) TOT-HLOS |
| [5] MFS | ▶ (1) ALLFLDS |

↑ ↓ to change dimension;
→ ← to change selected category

(<Enter> to go back to main menu)

Highest Level of Schooling

TOT-HLOS Total-Highest level of schooling

1- TOT-HLOS
2- <GR9
3- 9-13 W/O
4- 9-13 CERT
5- TRADES
6- W/O-CERT
7- W-CERT
8- SOMEUNIV
9- UNIVCERT
10- BACHELOR

PgUp PgDn Home
End Press + for full text

Use the ↑ ↓ keys to select a dimension; use ← or → to select a category.

Select the desired dimensions and categories and press <Enter>.

You will automatically return to the main menu after selecting the remaining dimensions.

4.2 RETRIEVAL MENU

There are four options:

- Browse data**
- Output selected data to File**
- Retrieve selected data into Worksheet**
- Retrieve Table Description**

4.2.1 Browse data

This option examines table content/format.

- → ← Cursor keys scroll horizontally column by column.
- **Tab** and <Shift-Tab> scroll horizontally screen by screen.
- ↑ ↓ scroll vertically line by line.
- **PgUp**, **PgDn** scroll vertically screen by screen.
- 'F' (function) keys (**F2**,...) and **Control/'F'** allow you to travel one category at a time through the other dimensions of the table.
- '+' '-' '*' '/' keys move categories through the wafers.
- **Shift** combined with **Arrow** or function 'F' keys, displays descriptive text for the categories of the corresponding dimension.
- To search by keyword, press **Alt** and **arrow** keys at the same time.

After browsing, press <Enter> or <Esc> to return to the Main Menu for your next option.

4.2.2 Output selected data to file

This option allows you to save the table created in the following output format:

- Data Interchange Format (.DIF) file
- Comma-Delimited format (.PRN) file
- Output files for TPL-TABLES
- .WK1 file for LOTUS 123
- Print-Image file
- .IMX file for Lotus Improv
- .DBF file for dBase

Make a selection by typing the highlighted letter or by highlighting the option and press <Enter>.

You will be prompted for the name of the output file:

Output file name (or * for Printer) == >

Provide a path and file name where you want to store your file. Example: g:\myfile.

Next, XV prompts you to indicate the table subset to be saved:

```
Indicate table subset wanted  
  
Return to Format menu  
Rows = PROVINCE (13)   Columns = SEX (3)  
Rows = AGE by PROVINCE (78)   Columns = SEX (3)  
Entire table
```

Use the arrow keys to highlight your choice and press <Enter> .

If you select 2nd line, (i.e. Rows = PROVINCE (13) Columns = SEX (3)), then you will be asked to select the wafer of your choice:

```
Indicate which category of AGE you wish to use:  
  
AGE (6)           (1) TOT-AGE  
  
← → to change selection, RETURN to proceed  
  
TOT-AGE   Total-Age groups
```

Use the arrow keys to change the selection and press <Enter> .

After making your selection, the screen will then return to the Main Menu.

If you select 3rd line, (i.e. Rows = AGE by PROVINCE (78) Columns = SEX (3)), the system will choose all categories in that wafer dimension and return to the Main Menu.

If you select "Entire table", the system will save the entire table to the file and return to the Main Menu.

4.2.3 Retrieve selected data into worksheet

4.2.3.1 Retrieve data into worksheet

During the BROWSE operation, all data are read directly from the disk and written directly to the screen but are not maintained in memory. To be able to perform computations or transformations with the data, it is first necessary to RETRIEVE the data from the selected view

into a WORKSHEET. The worksheet is a 2 dimensional entity, limited to rows and columns in the selected view.

Once in the worksheet, the data can be viewed.

Use the arrow keys to select this option and press <Enter> or by typing "W". The following screen will appear:

| |
|--|
| <p style="text-align: center;">Worksheet Operation</p> <p>Return to Main Menu Retrieve data into Worksheet View Worksheet Manipulate data in Worksheet Write Worksheet to a File Read a Comma-Delimited File into Worksheet Print Worksheet Alter Display Options</p> |
|--|

Data MUST first be retrieved into the worksheet before it can be manipulated. Select **Retrieve data into Worksheet** and press <Enter> or type "R".

The following screen will appear:

| |
|---|
| <p style="text-align: center;">Retrieval option</p> <p>Retrieve ALL rows and columns into the worksheet Retrieve only SELECTED rows and columns into the worksheet</p> |
|---|

Use the arrow keys to select the option you want and press <Enter>.

If you select 1st line - **Retrieve ALL rows and columns into the worksheet**, the following screen will appear:

Indicate which category of AGE wish to use:

AGE (6) (1) TOT-AGE

| |
|------------|
| 1- TOT-AGE |
| 2- 15-64 |
| 3- 15-24 |
| 4- 25-44 |
| 5- 45-64 |
| 6- 65+ |

→ ← to change selection, RETURN to proceed

TOT-AGE Total-Age groups

Pgup PgDn Home End
Press + for full text

Use the arrow keys to select the category you want and press <Enter>.

You will then be returned to the **Worksheet Operation**.

If you select 2nd line - **Retrieve only SELECTED rows and columns into the worksheet**, the following screen will appear:

Select categories of ROW dimension to load as Rows

| ROWS Categories | A longer description of the row dimension |
|--------------------|--|
| • | • |
| • | • |
| • | • |

↑↓ PgUp PgDn Home End SPACE to mark, RETURN once done

Use ↑↓ and **SPACE** to make your selection, then press <Enter>.

You will then be asked the categories of **SEX** to load as columns, and the wafer you wish to use. You will return to the **Worksheet Operation** after making your selection.

When you first retrieve data into the worksheet, space is automatically allocated and data are loaded. Subsequent retrievals can either **REPLACE** data already in the worksheet, or **MODIFY**

it (i.e. be added to it, multiplied by it, etc.). If you still select **Retrieve data into Worksheet** the following menu will appear:

| Retrieval option |
|--------------------------------------|
| Read into a new Worksheet |
| Add to contents of worksheet |
| Subtract from contents of worksheet |
| Multiply by contents of worksheet |
| Divide by contents of worksheet |
| Divide into contents of worksheet |
| Append to worksheet as extra ROWS |
| Append to worksheet as extra COLUMNS |

Select your option and press <Enter> or type the corresponding letter.

After making your selection, the screen will go to the **Retrieval Option**, i.e.:

| Retrieval Option |
|--|
| Retrieve ALL rows and columns into the worksheet |
| Retrieve only SELECTED rows and columns into the worksheet |

If you select 1st line - **Retrieve ALL rows and columns into the worksheet**, then you will be asked to select WAFER. If you select 2nd line - **Retrieve only SELECTED rows and columns into the worksheet**, then you will be asked to select rows, columns and a wafer.

After this is done, you will return to the **Worksheet Operation**.
(NOTE: if you **browse data** now, wafer will change.)

4.2.3.2 View Worksheet

Select this option to view worksheet.

- **↑↓** scroll vertically line by line.
- **PgUp, PgDn** scroll vertically screen by screen.
- **Home/End** go to beginning/end of line or document.
- **→←** scroll horizontally column by column.
- **<Tab>** and **<Shift-Tab>** scroll horizontally screen by screen.
- **F8** allows arithmetic operations.
- Global worksheet operations (like computing percent-changes, ratios based on a row/column, etc.) can be performed by highlighting a row or column (with Shift/Arrow) and then pressing **F9** and selecting an operation from the Global menu.

1. Creating a graph

Use **Shift** and the arrow keys to mark the data to be graphed. Note that only columns can be graphed. Press **F2** to create a line graph; **F4** to create a bar graph. Use **Del** to remove the column.

2. Comparing Two Columns of Data on a Graph

To compare two columns of data on the same graph, display your first set of data as described in 1. Return to the worksheet from the graph using the **<Enter>** key. Use **Shift** and the arrow keys to mark the data to be compared against the first set of data. When the appropriate column is highlighted, press the **F3** key to display the second set of data as a line graph, or press the **F5** key to display it as a bar graph.

In order to distinguish between the two sets of curves or bars on the graph, you have to compare the curve or bar values that are on the graph with the values beneath each label on the bottom left and right hand corners of the graph.

Each data series will more than likely have a different scale. If you would like to view the graph with the same scale for each data series, press the **F1** key while the graph is on the screen. The **F2** key will redraw the graph with individual scales. Pressing the **F3** key will set the Y-axis origin to zero on the original graph. Press the **F3** key a second time to set the Y-axis to zero on the second graph.

Press **<Enter>** to return to the worksheet. Press **<Enter>** again to return to the Manipulation Menu.

4.2.3.3 *Manipulate data in Worksheet*

Selection of this option will prompt the following screen:

| |
|---|
| <p style="text-align: center;">Indicate type of Manipulation</p> <p>Return to Manipulate Worksheet menu Perform ROW arithmetic Perform COLUMN arithmetic</p> |
|---|

Select your option and press <Enter> or type the letter of the option.

You can add, subtract, multiply or divide ROWS or COLUMNS or perform a combination of arithmetic calculations.

4.2.3.4 *Write Worksheet to a File*

This option allows you to write to an external file. The following screen will appear:

| |
|---|
| <p style="text-align: center;">Indicate output format wanted</p> <p>Return to Main Menu .DIF file Comma-Delimited format Output for TPL-TABLES .WK1 file for LOTUS .DBF file for dBase</p> |
|---|

Select the format you want and press <Enter>. You will be asked to enter a file name:

| |
|---|
| <p>Output file name (or * for Printer) ==></p> |
|---|

Enter a path and a file name and press <Enter>; XV will automatically save the worksheet in the specified format and return to the **Worksheet Operation**.

4.2.3.5 Read a Comma-Delimited File into Worksheet

This option reads a comma-delimited file from other software. You'll be prompted to enter the name of file to read:

| |
|-----------------------|
| Name of file to read? |
|-----------------------|

Enter a path and file a name and press <Enter> .

4.2.3.6 Print Worksheet

This option allows you to print your worksheet.

4.2.3.7 Alter Display Options

This option allows you to change the default settings.

| |
|--|
| <p style="text-align: center;">Display Options</p> <p>Return to Worksheet Menu Change # of Decimals in displays Change Column Width for displays Change symbol used to denote N/A</p> |
|--|

Select the option you wish to perform and press <Enter> or type the corresponding letter.

If you select **Change # of Decimals in displays**, the following will appear:

| |
|---|
| <p># of Decimals = 0 Enter new # of decimals, <Enter> to leave as is ==></p> |
|---|

Enter the number of decimal places desired and press <Enter> .

If you select **Change Column Width for displays**, the following will appear:

Col. Width = 9
New column width (or <Enter> to leave as is)?

Enter the desired column width and press <Enter>.

If you select **Change symbol used to denote N/A**, the following will appear:

The symbol being used for N/A is: <Space>
Enter symbol to be used instead (or <Enter> to leave it unchanged):

Type the desired symbol and press <Enter>.

4.2.3.8 Erase all data in worksheet

This option is available only after a worksheet has been retrieved. The system erases the data from the worksheet.

4.2.4 Retrieve Table Description

The purpose of this section is to provide the names and descriptions of the variables used in the selected table.

Select this option from the Retrieval Menu, the following screen will appear:

Enter Option wanted

Return to Main Menu
Print Documentation for a Table
Write Documentation for a Table to a File
Browse through Documentation for a Table

Select the option you wish to perform and press <Enter>.

Select **Print Documentation for a Table** to print out the detailed documentation.

If you select **Write Documentation for a Table to a File**, you will be asked:

Output file name (or * for Printer) == >

Enter the file name and press <Enter>.

If you select **Browse through Documentation for a Table**, the following screen will appear:

```

                Selected Table
Dimension    [ ] # of categories
  .          .
  .          .
  .          .

Use ↑↓ to select a dimension, then
hit Spacebar to view individual categories

                F1 - Help
```

Use the arrow keys to select a dimension and press <Spacebar> to view.

Once you are finished browsing, press <Enter>. This will return you to the previous option.

4.3 EXIT MENU

There are three options:

Do NOT exit program

Exit this program - (exit XV)

Shell to DOS - (type EXIT to return to XV)

4.4 CONFIGURE MENU

This option allows you to change the default settings. The following screen will appear:

Configure Menu

Designate a new Drive/Path for data
Change Printer Port
Change Graphics Resolution
Change # of Decimals in displays
Change Column Width for displays
Change symbol used to denote N/A
Stub Width (Print-Image output)
Make current View the default for (name of table)
Save current Options

Use the arrow keys to select option and press **<Enter>**.

The following options affect the way information is formatted **ONLY** when displayed on the screen or output to file; they do **NOT** change permanently the 7-digit precision for numbers stored in the original data file. The column width and number of decimals options must be carefully chosen to avoid data columns running into each other. The 'Not Available' symbol controls the appearance of empty cells. The Stub Width setting affects **ONLY** print-image files; if set above 10, category **TEXT** (rather than keywords) will be used.

4.4.1 Designate a new Drive/Path for data

This option allows to change the drive/path of the data. The following will appear:

current path ==> C:\EE

(**<Enter>** selects default directory, **<ESC>** leaves above path unchanged)

Enter new path ==>

Enter new path and press **<Enter>** or press **<Enter>** to select default, **<ESC>** to leave unchange.

4.4.2 Change Printer Port

This option allow you to change the printer port. The following will appear:

```
Printer Port
LPT1
LPT2
LPT3
```

Use the arrow keys to select the one you need and press **<Enter>** .

4.4.3 Change Graphics Resolution

The following are the graphics resolution you can select:

```
Graphics Resolution
VGA (640x480)
EGA (640x350)
CGA (640x200, monochrome)
```

Use the arrow keys to make your selection and press **<Enter>** .

4.4.4 Change # of Decimals in displays

If you select **Change # of Decimals in displays**, the following will appear:

```
# of Decimals = 0
Enter new # of decimals, <Enter> to leave as is ==>
```

Enter the number of decimal places desired and press **<Enter>** .

4.4.5 Change Column Width for displays

If you select **Change Column Width for displays**, the following will appear:

Col. Width = 9
New column width (or RETURN to leave as is)

Enter the desired column width and press **<Enter>**.

4.4.6 Change symbol used to denote N/A

If you select **Change symbol used to denote N/A**, the following will appear:

The symbol being used for N/A is: **<Space>**
Enter symbol to be used instead (or **<Enter>** to leave it unchanged):

Type the desired symbol and press **<Enter>**.

4.4.7 Stub Width (Print-Image output)

If you select **Stub Width (Print-Image output)**, the following will appear:

Current stub width for print-image file is 0

(Category keywords, instead of text, will be used for print-image outputs if the stub width is set to a value less than 10)

Enter new stub width (or **<Enter>** to leave it unchanged):

Enter a number less than 10 and press **<Enter>**.

4.4.8 Make current View the default for (name of table)

To save the current view as the default, select the **"Make current View the default for (table name)"**. When enter is pressed, the system accepts the default for the current view; no message or prompt is displayed to confirm this action.

Note: Use this option with caution; this view will become the permanent default for the table.

4.4.9 Save current Options

Save current Options to allow you to save the **PATH** to the tables and the current options, to use as defaults in future sessions.

5.0 GLOSSARY OF TERMS

Provides definitions of commonly used terms related to computers and to XV in particular.

1. **ARRAY** In XV, cross-tabulation; a cross-sectional table.
2. **ARROW KEYS** Keys located on the right-hand side of the keyboard. These arrows which point up (↑), down (↓), left (←) and right (→), move the cursor one space at a time on the screen.
3. **CATEGORY** A grouping within a dimension. For example, the dimension "SEX" is comprised of three categories: TOTAL, MALES and FEMALES.
4. **CELL** In a spreadsheet, the rectangle formed by the intersection of a row and column.
5. **CHARACTERISTIC**
An attribute or property of data.
6. **CONTIGUOUS** Adjacent; placed one after the other.
7. **COLUMN** In character-based video displays, a vertical one-character wide line down the screen. In the worksheet, a vertical block of cells. In XV, "columns" is the second dimension. **See Multi-dimensional.**
8. **CONFIGURE** An XV command which allows you to alter existing defaults or to specify a new drive/path for data.
9. **CTRL** Control key. In IBM PC-compatible computers, this key is pressed at the same time as another key to initiate program commands. For example, when browsing a table, CTRL/Function Key scrolls one category at a time through the other dimensions of the table.
10. **CURSOR** A pointer or indicator that shows where the next character will appear when you press a key.
11. **DATABASE** A collection of related information about a subject organized in a useful manner that provides a base for activities such as retrieving information, drawing conclusions and making decisions. For XV, a database is a collection of tables related to the same subject.
12. **DELETE KEY** A key that erases the character at the cursor. In XV, unmarks categories so they are excluded from a table.
13. **DIF** Data Interchange Format.

14. DIMENSION In XV, a term used to identify specific aspects of the required statistics. For example, Period, Quantifier, Sex, etc. See **Multi-dimensional**.
15. DISK DRIVE A secondary storage medium such as a floppy disk drive or a hard disk. This term usually refers to floppy disk drives.
16. DIRECTORY An index to the files stored on a disk or portion of a disk that can be displayed on the screen.
17. DOS An acronym for Disk Operating System. It usually refers to PC-DOS and MS-DOS, the operating systems of IBM personal computers and compatibles.
18. DRIVE See disk drive.
19. ENTER/RETURN A key that confirms a command, sending a command to the central processing unit (CPU). In wordprocessing, this key starts a new paragraph.
20. ESCAPE (ESC) A key that is used to cancel the current operation and return to the previous step.
21. EXIT Allows you to leave XV or shell to the DOS prompt.
22. EXTENSION A three-letter suffix to a DOS file name that describes the file's contents. For example, .TXT or .DOC is the usual extension attached to document files. Print file generally used .PRN as the extension.
23. FILE A collection of information stored as a unit on an electronic storage medium such as a disk drive.
24. FORMAT The patterns and standards a program uses to store data on a disk.
25. FUNCTION KEY A programmable key that provides special functions depending on the software you are using. They are usually numbered F1, F2, and so on. In XV, F1 = HELP, F9 = Worksheet Functions (when viewing a worksheet), etc.
26. GLOBAL In XV, impacts a whole row or column. For example, the global worksheet operations (computing percent-changes, ratios based on a row/column, etc.) can be performed by highlighting a row or column, then pressing F9 and selecting an operation from the Global Menu.

27. **HARDWARE** The electronic components, peripherals and equipment that make up your computer system.
28. **HELP** In XV, the F1 key displays context-sensitive help scripts related to the command, mode or action that you are currently performing.
29. **INSERT** In XV, a key used to mark all categories for inclusion in a table.
30. **MAIN MENU** or **MENU BAR**
The top-level menu that provides access to all system functions.
31. **MENU** An on-screen list of available options. XV uses pull-down menus which are command menus that appear only after you have chosen the menu's name.
32. **MULTI-DIMENSIONAL**
XV generates multi-dimensional tables; i. e. it can present data in more than the standard two dimensions (rows and columns) generally associated with tables. The third dimension takes the form of "wafers" which represent pages or slices of the data. For the 4th, 5th, etc. dimensions, we specify a category as the link into the dimension.
33. **PATH** The route a program must follow to access data on a secondary storage device.
34. **PERIOD** In XV, a dimension denoting an interval of time, usually in terms of the time period during which the data was collected. It always appears first in the list of available dimensions.
35. **PORT** A mechanism used to direct the flow of data into and out of the central processing unit to peripheral hardware such as printers.
36. **PRECISION** The number of digits past the decimal that are used to represent a quantity.
37. **QUANTIFIER** In XV, a dimension denoting a "measure" of a specific subject area. It always appears last in the list of available dimensions.
38. **RETRIEVE** The process of finding and displaying or printing the data selected by the user.
39. **ROW** In the worksheet, a horizontal block or cells running across the breadth of the worksheet. In XV, "row" is the first dimension. **See Multi-dimensional.**

40. SCROLL To move the window horizontally or vertically on the screen so that another portion of the text can be viewed.
41. SELECT To specify data for retrieval.
42. SHELL A utility program designed to provide access to a program or operating system. For example, you can temporarily suspend XV and access the operating system with the command "Shell to DOS".
43. SOFTWARE System, utility or application programs used by a computer system.
44. STUB A row on a worksheet. Stub text refers to the name or identifier assigned to a row of data.
45. SUB-DIRECTORY A directory within a directory that may contain files and additional sub-directories.
46. SUB-MENU A set of lower level commands that are available when you select a top level command. For example, SELECT is one of the options available in your Main Menu or Menu Bar. The sub-menu for SELECT provides additional commands such as: Select a Table and Select a View.
47. TAB KEY In XV, scrolls to the next page of text. Shift/TAB scrolls to the previous page of text.
48. TABLE In a database program, the structure in which data items are linked by relationships formed by placing them in rows and columns. The rows represent data records, the columns represent data fields.
49. WAFER A page or slice of information. In XV, "wafer" is the third dimension. See **Multi-dimensional**.
50. WINDOW A rectangular area on the screen through which you can view a document, worksheet, database, etc.
51. WORKSHEET A spreadsheet or grid containing rows and columns. It usually contains headings, numbers, and formulas.

