9.2 **A company wants to get data for the production from each of the five departments in each of the four plants. The total production of each plant should be calculated and graphed to the nearest thousand.**

The production should be stored in the two-dimensional array

int Units[NumberPlants][NumberDepts];

The program is given below. Try to write the two functions

void GetData(int Units[ ][NumberDepts]);
void Graph(int Units[ ][NumberDepts]);

so that the program can function as shown in the sample running.

The function *GetData* is used to get data from user and the function *Graph* is used to produce the bar chart.

```c
#include <stdio.h>
#include <math.h>
#define NumberPlants 4
#define NumberDepts 5
#define PrintChar '*'

void GetData(int Units[ ][NumberDepts]);
void Graph(int Units[ ][NumberDepts]);

int main (void)
{
    int Units[NumberPlants][NumberDepts];
    char Choice;

     do
      {
            printf("\nThe program displays a graph showing the ");
    printf("\nproduction of each plant in the company.\n");

    GetData(Units);
    Graph(Units);

    printf("\n\nDo you want to try again (y/n)? ");
    scanf(" %c", &Choice);
     } while ((Choice == 'y') || (Choice == 'Y'));


     printf("\nEnd of Program");
     printf("\n");

     return 0;
}
```

Sample running :

The program displays a graph showing the
production of each plant in the company.

Please enter number of units produced by each department in plant 1
1200   2500   3600   1456   4500<CR>

Please enter number of units produced by each department in plant 2
2400   100   2500   800   4500<CR>

Please enter number of units produced by each department in plant 3
2400   3600   1480   6800   9500<CR>

Please enter number of units produced by each department in plant 4
140   2510   4000   1000   1400<CR>

Units produced in nearest thousand :

Plant # 1 ************ (13)

Plant # 2 ********* (10)

Plant # 3 *********************** (24)

Plant # 4 ******** (9)

Do you want to try again (y/n)? n

End of Program