

12. Write short notes on :

a) Benefits of data files:

File handling in C refers to the task of storing the data in the form of input or output produced by running C programs in data files, namely, a text file or a binary file, for future reference and analysis.

Some benefits of data files in C:

1. Resuability:

It helps in preserving the data or informations generated after running the program.

2. Large Storage Capacity:

Using files, you need not to worry about the problem of storing data in bulk.

3. Saves time:

There are certain programs that requires a lot of input from the user. You can easily access any part of the code with the help of certain commands.

4. Sharing:

You can easily transfer the contents of a file from one coputer to another without having to worry about the loss of data.

b) Graphics Function in C:

There are many graphics library functions in C language which are used to draw different drawing shapes.

Some of them are:

1. `line(x1,y1,x2,y2);`
2. `arc(xCenter,yCenter,start,end,radius);`
3. `circle(xCenter,yCenter,radius);`
4. `ellipse(xCenter,yCenter,start,end,Xradius,Yradius);`
5. `floodfill(x1,y1,color);`
6. `rectangle(x1,y1,x2,y2);`
7. `getmaxx();`
8. `getmaxy();`
9. `closegraph();`

1. line():

Syntax: `line(x1,y1,x2,y2);`

2. arc():.

Syntax: `arc(xCenter,yCenter,start,end,radius);`

3. circle() :

Syntax: `circle(xCenter,yCenter,radius);`

4. ellipse():

Syntax: ellipse(xCenter, yCenter, start, end, Xradius, Yradius);

5. floodfill():

This function is used to fill an enclosed area.

Syntax: floodfill(x1,y1,color);

6. rectangle():

Syntax: rectangle(x1,y1,x2,y2);

7. getmaxx():

This function is used to returns the maximum X coordinate for current graphics mode and driver.

Syntax: getmaxx();

Example: int xmax=getmaxx();

8. getmaxy():

This function is used to returns the maximum Y coordinate for current graphics mode and driver.

Syntax: getmaxy();

Example: int ymax=getmaxy();