



## PRACTICAL-2

### To study various in build graphics functions

Graphical mode functions-

There are so many graphical functions in C graphics library. All the graphics mode functions are in <graphics.h> file. So we must include the graphics.h file to use those functions. To run a c program in graphical mode the most important functions are as below.

**initgraph():** it is one of the function that is used to initialize the computer in graphics mode. Its syntax is as

**initgraph(&gdriver, &gmode, "graphics driver path");**

**closegraph():** It is the graphical function that is used to close the graphics mode initialized by the initgraph() function.

**graphresult():** it is a graphical function that returns the value 0 if the graphics is detected correctly and the driver is correctly initialized to correct graphics mode other wise it returns some error code than 0.

**grapherrormsg(errorcode):** This function returns the message string corresponding to the errorcode returned by the graphresult() function.

**cleardevice():** This function is used to clear the screen in graphical mode as clrscr() in text mode. After correctly initialized in graphics mode, we can use the different graphical function available in the c- library in graphics.h. Following are some basic graphical functions for drawing geometrical objects.

**setcolor(color):** It is a function that is used to set the color of the drawing object with given color. The color is indicated by the integer from 0 to 15 ( 16 color)

**moveto(x, y):** it is used to move the cursor in display screen at specified co-ordinates by the value (x,y).

**outtext(" text string "):** prints the text string in the current position of screen.

**outtextxy(x, y, "string"):** prints the string from the co-ordinate (x,y) position.

**lineto(x, y):** draws the line from current position to (x,y) position.

**putpixel(x, y, color):** displays a pixel(point) at (x,y) with given color.

**line(a, b, c, d):** draws line from (a,b) to (c,d).

**circle(x, y, r):** prints circle with center (x,y) and radius r.

**rectangle(a, b, c, d):** prints rectangle where (a,b) is upper left coordinate and (c,d) is lower right co-ordinates of rectangle.

**Arc-** arc draws the arc on the screen, arc is a part of the circle. arc(x, y, starting angle, ending angle, radius);

Example: arc( 100,100,90,180,50);

**Setfillstyle-** setfillstyle is used to set the color and style to be filled in the object using the flood fill method. setfillstyle(STYLE, COLOR);

Example: setfillstyle(1,RED)



**Floodfill**- floodfill function is used to fill the color in the object, object may be circle, rectangle or any other closed image. floodfill(x,y,boundary color);

Example: floodfill(100,100,BLUE);

**Ellipse**- ellipse function is used to draw the ellipse on the screen. ellipse(x, y, starting angle, ending angle, xradius, yradius);

**Example:** ellipse(100,100,90,200,20,20);

**Getcolor**- getcolor returns the current drawing color. getcolor();

Example: intclr = getcolor();

**Settextstyle**- settextstyle sets the current text characteristics like font, direction and size. settextstyle(font, direction size);

Example: settextstyle(1,1,10);

#### Font

1. DEFAULT
2. TRIPLEX
3. SMALL
4. SANS SERIF
5. GOTHIC

<b>Direction</b>	0	HORIZ_DIR
		VERT_DIR

<b>Size</b>	0	SMALL
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10	large
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