* Project Report On Vector Graphics Application
* **VECTOR GRAPHICS EDITOR**
* DESCRIPTION

Vector graphics is the use of geometrical primitives such as points, lines, curves, and shapes or polygon(s), which are all based on mathematical expressions, to represent images in computer graphics. Vector graphics is based on images made up of vectors (also called paths, or strokes) which lead through locations called control points. Each of these points has a definite position on the x and y axes of the work plan. Each point, as well, is a variety of database, including the location of the point in the work space and the direction of the vector (which is what defines the direction of the track). Each track can be assigned a colour, a shape, a thickness and also a fill. This does not affect the size of the files in a substantial way because all information resides in the structure; it describes how to draw the vector. In this paint program, we can draw several objects (line/triangle/rectangle/circle).On single window we can draw multiple objects and to select the one of them we have used ‘layer concept’ of photoshop. We can also perform some operations on the objects after selection them (rotate/translate/scale).First of all, we will store this values using opcodes for different objects, and endpoints of line segments into arrays. Then these arrays will be stored into files.

* Graphics

#include<graphics.h>

IT IS A HEADER FILE WHICH IS USED FOR GRAPHICALLY FORMATTED DISPLAY OF DATA. IT USES BASIC FUNCTION LIKE INITGRAPH TO DETECT AND INITIALIZE GRAPHIC DRIVER AND GRAPHIC MODE.

**Initgraph()**:

**InitGraph**initializes the graph package. It has 3 parameters.

1. Graphic driver

2. Graphic mode

3. Path to bgifiles(needed to include graphics)

GraphDriver has two valid values: GraphDriver =0 which performs an auto detect and initializes the highest possible mode with the most colours. 1024x768x64K is the highest possible resolution supported by the driver.

For another mode, GraphDriver needed to be set to a value different from zero and graphmode to the any other mode.

* **Graphic Functions**

1) Line: requires co-ordinates of two points and draws line in between them.

2) Rectangle: requires co-ordinates of two points (upper left & lower right) and draws rectangle considering the points diagonally.

3) Bar: requires co-ordinate of two diagonal points and draws bar.

4) Setcolor: Set the colour from available set.

5) Setfillstyle: It sets the pattern and colour to fill by floodfill. It requires pattern no and colour as argument.

6) Settextstyle: This is a function for formatted text style. It requires text pattern, direction (0 for horizontal and 1 for vertical) and size of text as parameters.

7) Outtextxy: This is a function for formatted string display. It requires the string and co-ordinate of point from where display this string.

🡪 Snap Shot ::

