

Cycle 1

1. (a) Familiarisation of computer graphics hardware and software - Write introduction, CRT, raster scan, random scan, monitor parameter, flat panel displays, input devices, output devices
(b) Familiarisation of Display Standards (CGA, MDA, SVGA,, etc).
(c) Familiarisation of OpenGL - Along with point plotting program and output.
2. dda line drawing
3. bresenham line drawing
4. circle drawing : polar, non polar, mid point
5. ellipse drawing: polar, non polar, mid point

Cycle 2

1. Experiment V: 2D transformations Write a menu driven program to Implement 2D transformations on an equilateral triangle A: Translation B: Rotation C: Scaling D: Reflection
2. Experiment VIII: Seed filling algorithms
Write a program to implement seed filling using
a) flood fill
b) boundary fill
3. EXPERIMENT VII: Bezier curve algorithm
Write a program to implement Bezier curve algorithm
4. Experiment VI: Clipping algorithms
Write a program to
A) clip a line using Cohen Sutherland Line Clipping algorithm.
B) clip a polygon using Sutherland Hodgeman polygon clipping algorithm

cycle 3

1. Write a program to display swinging pendulum
2. Write a program to show flag fluttering
3. Write a program to show car motion. There should be facilities to control the direction, speed and horn
4. Write a program to show clock with its hour, minute and second hands
5. Write a program to show a planet rotating around sun.
6. Write a program to show water filling in a bucket