



A.Y. 2024-25 | Semester - V

Lab Manual

2301CS522 – Computer Graphics

Prof. Vijay M Shekhat

Sr.	Practical
Lab-01	Introduction to C graphics.
Lab-02	 To study about C graphics including header files and functions. [A] Use Inbuilt Functions. Write a C program to draw house shape using inbuilt function. [A] Write a C program to draw some beautiful shape (By yourself) using inbuilt function. [B] Write a C program to draw smiley face. [C]
Lab-03	Implement DDA Algorithm. 1. Write a C program to implement DDA line drawing algorithm. [A] 2. Write a C program to draw triangle using DDA line drawing algorithm. [B] 3. Write a C program to draw star using DDA line drawing algorithm. [C]
Lab-04	Implement Bresenham's Algorithm. 1. Write a C program to implement Bresenham's line drawing algorithm. [A] 2. Write a C program to draw parallelogram using Bresenham's line drawing algorithm. [B] 3. Write a C program to draw dimond using Bresenham's line drawing algorithm. [C]
Lab-05	 Implement Midpoint Circle Algorithm. Write a C program to implement Midpoint circle drawing algorithm. [A] Write a C program to draw 5 concentric circle using Midpoint circle drawing algorithm. [B] Write a C program to draw given shape using Midpoint circle drawing algorithm. [C]
Lab-06	Implement Midpoint Ellipse Algorithm. 1. Write a C program to implement Midpoint ellipse drawing algorithm. [A]
Lab-07	 Implement Character Generation. Write a C program to implement Character Generation algorithm for letter 'X'. [A] Write a C program to implement Character Generation algorithm for first letter of your name. [B] Write a C program to implement Character Generation algorithm for writing DARSHAN UNIVERSITY. [C]
Lab-08	 Implement Boundary and Flood Fill Algorithm. Write a C program to implement Boundary fill algorithm. [A] Write a C program to implement Flood fill algorithm. [A] Fill different-different color in shape drown in Lab 5 program 3. [C]
Lab-09	Use Attributes of Primitives. 1. Draw parallelogram with all four side have different colors. [A]



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	 Draw 4 lines with different type (solid, dotted, dashed, etc.). [A] Draw rainbow using arc of different colors. [C]
Lab-10	Implement 2D Transformation. 1. Write a C program to implement basic 2D translation. [A] 2. Write a C program to implement basic 2D rotation. [A] 3. Write a C program to implement basic 2D scaling. [A] 4. Write a C program to generate animation effect using basic 2D transformations. [C]
Lab-11	Implement 2D Reflection and Shearing. 1. Write a C program to implement 2D reflection. [A] 2. Write a C program to implement 2D shearing. [A]
Lab-12	Implement Cohen Sutherland Algorithm. 1. Write a C program to implement Cohen Sutherland line clipping algorithm. [A]
Lab-13	Implement Liang-Barsky Algorithm. 1. Write a C program to implement Liang-Barsky line clipping algorithm. [A]