

Computer Graphics and Multimedia Laboratory

Assignment 1 For BCA 6th Semester 2020

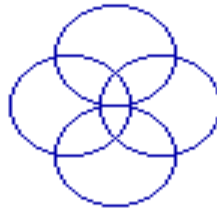
Compiled
By
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All the students of BCA 6th Semester have to submit this Assignment 1 on or before 20. 04. 2020.

Guidelines:

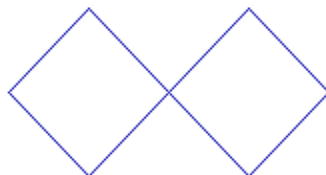
- You can use DEV C++, Turbo C++ or any other software to compile & run your code.
- It is necessary to prepare this assignment in MS Word.
- Every Solution must contain: Problem with serial number (as given in Assignment-1), Solution Code and Solution Output.
- Without *proper output* of respective *code*, the *solution* will be considered as a *wrong solution*.
- Email your Solution of Assignment 1 to subhadip.comp@gmail.com on or before 20.04.2020

1. Write a Graphics program to draw the following figure using Bresenham's circle drawing algorithm.



2. Write a Graphics program to display the first letter of your name using DDA line drawing algorithm.

3. Write a Graphics program to draw the following figure using Generalized Bresenham's line drawing algorithm.



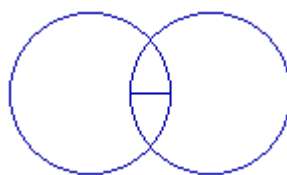
4. Write a Graphics program to draw an ellipse using Mid-Point algorithm.

5. Write a Graphics program to the following transformations in sequence –

- A. 45° rotation of a line about origin.
- B. Reflection about line X=0.

6. Write a Graphics program to draw a hexagon using Generalized Bresenham's line drawing algorithm.

7. Write a Graphics program to draw the following figure using standard drawing algorithm without using any inbuilt functions.



8. Write a Graphics program to implement polygon filling algorithm.

9. Write a Menu driven Graphics program to translate, rotate and scale a line about origin.

10. Write a Graphics program to rotate a triangle about origin.