

MA517M-Basic Programming Laboratory

Tutorial Problem - 1

11 August 2025

Answer All Questions

1. Complete all Examples given in the presentation
2. Write a C++ Program to compute the area and perimeter of the following (with appropriate inputs)
 - (a) Circle
 - (b) Square
 - (c) Rectangle
 - (d) Triangle
3. Write a C++ Program to compute the lateral surface area, total surface area and volume of the following 3 dimensional objects (with appropriate inputs)
 - (a) Sphere
 - (b) Cylinder
 - (c) Cone
 - (d) Prism
4. Write a C++ Program to compute the centroid of the following (with appropriate inputs)
 - (a) Triangle
 - (b) Trapezium
 - (c) Square
5. Input 5 integers from user and save them to a text file named numbers.txt.
6. Input temperature in Celsius, convert to Fahrenheit using $F = (C * 9/5) + 32$, display result.
7. Input total minutes from user, convert and display as hours and remaining minutes.
8. Input principal, rate, and time; calculate simple interest $= (P * R * T)/100$ and display it.
9. Read 5 numbers from a file numbers.txt, calculate the average of these five and display it.
10. Input x_1, y_1, x_2, y_2 ; calculate Euclidean distance and display it.