

**Dhaka University of Engineering & Technology, Gazipur**  
**Computer Science and Engineering Department**  
**CSE 1122 (Structured Programming Language Sessional)**

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These Programs illustrates on Operators and I/O statements in C Language.

1. Write a program to convert a temperature in degrees Fahrenheit to degrees Celsius.
2. Write a program to find the area and display it of
  - i. a circle given its radius.
  - ii. A triangle given its three sides
  - iii. A rectangle given its length and breadth.
3. Write a program that converts **meter-type height** into **[feet (integer), inch(float)]-type height**.
4. Your program should get one float typed height value as a keyboard input and prints integer typed feet value and the rest of the height is represented as inch type. (1m=3.2808ft=39.37inch)
5. Write a program that takes hours and minutes as input, and then outputs the total number of minutes. (1 hour 30 minutes = 90 minutes).
6. Write a program to read a number from the user and check whether the number is EVEN or ODD using conditional operator (? :)
7. Write a program that will read the value of x and evaluate the following function using conditional operator (? :)  
    
$$y = \begin{cases} 1 & \text{for } x > 0 \\ 0 & \text{for } x = 0 \\ -1 & \text{for } x < 0 \end{cases}$$
8. write a program that will take an ASCII value from user and output the corresponding character & vice versa.
9. Write a program to read a character from the user and for each input character print a message to say the whether the character is a vowel, a consonant, a digit or neither.
10. Write a program
  - i. to swap two numbers using temporary variable
  - ii. to swap two numbers without using temporary variable