

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

These Programs illustrate some basic practice problems on *Operators*, *if-else* statements and basics of *Loop* in C Language.

1. Write a program to convert a temperature in degrees Fahrenheit to degrees Celsius.
2. Write a program that converts **meter-type height** into **[feet (integer), inch (float)]- type height**.
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)
3. Write a program to read a number from the user and check whether the number is EVEN or ODD using conditional operator (? :)
4. Write a program that will read the value of x and evaluate the following function using conditional operator (? :)
 $y=1$ for $x > 0$
 0 for $x = 0$
 -1 for $x < 0$
5. 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.
6. Write a C program which will find the largest number from the three numbers given by the user.
7. The factorial of an integer **n**, written **n!**, is the product of the consecutive integers 1 through **n**. For example, factorial of 5 is calculated as $5! = 5 * 4 * 3 * 2 * 1 = 120$

Write a program to generate and print a table of the first 10 factorials. (**Use only conditional statements: No Loop !!!**).

8. Write a program that prints the quadrant number of a point (x,y) on a plane.

Recall that points in quadrant 1 have positive x and y values, points in quadrant 2 have a negative x value and a positive y value, points in quadrant 3 have negative x and y values, and the remaining points are in the quadrant 4. If a point is on an axis, choose the quadrant with the lower quadrant number.

9. Write a C program to input a number from the user and print it into words using a for loop.

Input

Input number: 1234

Output

One Two Three Four

10. Write a C program to calculate the summation of the following series for a user input, **n**:

$4 - \frac{4}{3} + \frac{4}{5} - \frac{4}{7} + \dots \dots \dots n^{\text{th}} \text{ term} .$

Input (n)	Output
20	3.091624
105	3.151116
