



**Python**

**Assignment (if-else)**

- ❑ Write a Python program to find the maximum between two numbers.
- ❑ Write a Python program to find a maximum between three numbers.
- ❑ Write a Python program to check whether a number is negative, positive or zero.
- ❑ Write a Python program to check whether a number is divisible by 5 and 11 or not.
- ❑ Write a Python program to check whether a number is even or odd.
- ❑ Write a Python program to check whether a year is a leap year or not.
- ❑ Write a Python program to check whether a character is an alphabet or not.
- ❑ Write a Python program to input any alphabet and check whether it is vowel or consonant.
- ❑ Write a Python program to input any character and check whether it is alphabet, digit or special character.
- ❑ Write a Python program to check whether a character is uppercase or lowercase alphabet.
- ❑ Write a Python program to input week number and print week day.
- ❑ Write a Python program to input the month number and print the number of days in that month.
- ❑ Write a Python program to count the total number of notes in a given amount.
- ❑ Write a Python program to input angles of a triangle and check whether triangle is valid or not.
- ❑ Write a Python program to input all sides of a triangle and check whether the triangle is valid or not.
- ❑ Write a Python program to check whether the triangle is equilateral, isosceles or scalene triangle.
- ❑ Write a Python program to find all roots of a quadratic equation.
- ❑ Write a Python program to calculate profit or loss.
  
- ❑ Write a Python program to input marks of five subjects Physics, Chemistry, Biology, Mathematics and Computer. Calculate percentage and grade according to following:
  - Percentage  $\geq 90\%$  : Grade A
  - Percentage  $\geq 80\%$  : Grade B
  - Percentage  $\geq 70\%$  : Grade C
  - Percentage  $\geq 60\%$  : Grade D
  - Percentage  $\geq 40\%$  : Grade E
  - Percentage  $< 40\%$  : Grade F

- ❑ Write a Python program to input basic salary of an employee and calculate its Gross salary according to following:  
Basic Salary  $\leq 10000$  : HRA = 20%, DA = 80%  
Basic Salary  $\leq 20000$  : HRA = 25%, DA = 90%  
Basic Salary  $> 20000$  : HRA = 30%, DA = 95%
  
- ❑ Write a Python program to input electricity unit charges and calculate total electricity bill according to the given condition:  
For first 50 units Rs. 8.50/unit  
For next 100 units Rs. 9.75/unit  
For next 100 units Rs. 10.20/unit  
For unit above 250 Rs. 12.50/unit  
An additional GST of 18% is added to the bill