

Day 2 Assignment

1. Write A Program which is taking 5 int value and calculate sum of cube of all numbers [Write cube function]
2. Write a Python function to find the maximum of three numbers.
3. write a program to find given number is positive ,negative or zero.
4. Write a program that prompts the user to input a year and determine whether the year is a leap year or not.
 - Leap Years are any year that can be evenly divided by 4. A year that is evenly divisible by 100 is a leap year only if it is also evenly divisible by 400.
 - Example:
 - 1992 Leap Year
 - 2000 Leap Year
 - 1900 NOT a Leap Year
 - 1995 NOT a Leap Year
5. Write a program that prompts the user to input number of calls and calculate the monthly telephone bills as per the following rule:
 - Minimum Rs. 200 for up to 100 calls.
 - Plus Rs. 0.60 per call for next 50 calls.
 - Plus Rs. 0.50 per call for next 50 calls.
 - Plus Rs. 0.40 per call for any call beyond 200 calls.
6. The marks obtained by a student in 3 different subjects are input by the user. Your program should calculate the average of subjects and display the grade. The student gets a grade as per the following rules:

Average	Grade
90-100	A
80-89	B
70-79	C
60-69	D
0-59	F

7. Write a program that will calculate the price for a quantity entered from the keyboard, given that the unit price is Rs 5 and there is a discount of 10 percent for quantities over 30 and a 15 percent discount for quantities over 50.
8. Write a program that prompts the user to input a character and determine the character is vowel or consonant.
9. write a function to return simple interest.

- To calculate simple interest, you can use the formula: **$SI = (P \times R \times T) / 100$**
 - SI: Stands for simple interest
 - P: Represents the principal amount
 - R: Represents the interest rate per year
 - T: Represents the time in years

10. write a function to return compound interest.

- **$CI = P (1 + r/n)^{nt}$**
 - P - Principal Amount
 - r - Rate of interest
 - n - Number of times interest compounds in a year
 - t - Number of years