

PRACTICE SET-I

1. Write a program for printing “WELCOME TO IIIT Srikakulam”.
2. Write a program which reads two integers from the user and print the sum and difference of these two integers.
3. Write a program to find quotient and remainder of two integers entered by the user.
4. Write a program to multiply two real numbers.
5. Write a program to print the ASCII value of a character.
6. The marks obtained by a student in five different subjects are input through the keyboard. Write a program to find out the *total marks* and *overall percentage of marks* obtained by the student. Assume that the maximum marks that can be obtained by the student in each subject is 100.
7. Write a program to accept the distance between two cities (in kilometers) and convert this distance in meters, feet, inches and centimeters.
8. Write a program to calculate the area and circumference of a right-angled triangle.
9. Write a program to calculate the area of circle.
10. Write a program to convert the temperature from degree Centigrade to Fahrenheit.
11. Program to read principal amount (P), rate of interest(R) and time (T) as input and find simple interest(SI). $[SI = P \cdot R \cdot T / 100]$
12. Rama's basic salary (BS) is input through the keyboard. His dearness allowance (DA) is 40% of basic salary, and house rent allowance (HRA) is 20% of basic salary. Write a program to calculate his gross salary (GS). $[GS = BS + DA + HRA]$.
13. If a three-digit number is input through the keyboard, write a program to calculate the sum of its digits (use % operator).
14. Write programs to compute the following arithmetic expressions (use a=2, b=5, c=10)
 - a. $ax^2 + bx + c$ (where x is a variable).
 - b. $a + b/c$
 - c. $25\%b + b/3 + b/a + c\%2$
 - d. $a^3 + b^2 - c$
15. Given coordinates of three corner points of a triangle, Coordinate of a fourth point P is also given. Write program to check whether P lies within the triangle or not.

16. Any year is entered through the keyboard, write a program to determine whether the year is leap or not using conditional operator.
17. Write a program to calculate mileage reimbursement for a salesperson at rate of 10 /- per KM. Read starting odometer reading and ending odometer reading from the keyboard.
18. Write a program that takes the length and width of a rectangular yard and the length and width of a rectangular house situated in the yard. Your program should compute the time required to cut the grass at the rate of two square feet a second.
19. Write a program that takes as input the numerators and denominators of two fractions: your program should display the numerator and denominator of the fraction that represents the product of two fraction and also display the percentage equivalent of the resulting product.
20. Calculate the sum of the two fractions (Refer Q.no:19)