OOPS With Java : Day 2 : 16-04-2024

- 1. Write a program to check if a given number is positive, negative, or zero.
- 2. Write a program to determine whether a given year is a leap year or not.
- 3. Write a program to check if a given character is a vowel or a consonant.
- 4. Write a program to find the largest of three numbers entered by the user.
- 5. Write a program to check if a given number is even or odd.
- 6. Write a program to determine the grade of a student based on their marks.

90 or above: A

80-89: B 70-79: C 60-69: D Below 60: F

- 7. Write a program to determine if a triangle is equilateral, isosceles, or scalene based on its side lengths.
- 8. Write a program to check if a given number is divisible by both 5 and 11.
- 9. Write a program to calculate the net salary of an employee based on the following conditions:

If the basic salary is less than or equal to 10000, the HRA (House Rent Allowance) is 20% of the basic salary

and the DA (Dearness Allowance) is 80% of the basic salary.

If the basic salary is greater than 10000, the HRA is 25% of the basic salary and the DA is 90% of the basic salary.

10. Write a program to calculate the income tax payable by an individual based on their annual income, considering the following tax slabs:

Income less than or equal to 2.5 lakhs: No tax.

Income greater than 2.5 lakhs and less than or equal to 5 lakhs: 5% of the income.

Income greater than 5 lakhs and less than or equal to 10 lakhs: 10% of the income.

Income greater than 10 lakhs: 15% of the income.