IF…………….. ELSE …………

Question 1:

Even or Odd
Write a program that asks the user to enter a number and displays whether entered number is an odd number or even number.

```java
import java.util.Scanner;

public class EvenOdd
{
    public static void main(String[] args)
    {
        int number;

        // Create a Scanner object to read input.
        Scanner sc = new Scanner(System.in);

        // Get number from the user.
        System.out.print("Enter an integer: ");
        number = sc.nextInt();

        // Determine even or odd.
        if (number % 2 == 0)
        {
            System.out.println(number +" is even");
        }
        else
        {
            System.out.println(number +" is odd");
        }
    }
}
```

Question 2:

Absolute value
Write a program that asks the user to enter a number and displays the absolute value of that number.

Question 3:

Discount and Revenue
Revenue can be calculated as the selling price of the product times the quantity sold, i.e. revenue = price × quantity. Write a program that asks the user to enter product price and quantity and then calculate the revenue. If the revenue is more than 5000 a discount is 10% offered. Program should display the discount and net revenue.

Question 4

Largest Number
Write a program that asks the user to enter numbers in three variables and then displays the largest number.

Question 5

Positive, negative or zero
Write a program that prompts the user to input a number. The program should then output the number and a message saying whether the number is positive, negative, or zero.

Question 6

Valid Triangle
A triangle is valid if the sum of all the three angles is equal to 180 degrees. Write a program that asks the user to enter three integers as angles and check whether a triangle is valid or not.

Question 7:

Leap Year
Any year is input by the user. Write a program to 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
```

```java
 import java.util.Scanner;      // Needed for the Scanner class

public class Leapyear
{
   public static void main(String[] args)
   {
      int year;     // holds a year

      // Create a Scanner object for keyboard input.
      Scanner sc = new Scanner(System.in);

      // Get the year.
      System.out.print("Enter a year : ");
      year = sc.nextInt();

      // Determine whether the year is leap year.
      if ((year % 4 == 0) && ((year % 400 == 0) || (year % 100 != 0)))
      {
         System.out.println("A leap year");
      }
      else
      {
         System.out.println("Not a leap year");
      }
   }
}
```

Question 8

Telephone Bill
Write a program to 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.

```java
import java.util.Scanner;

public class TelephoneBill
{
    public static void main(String[] args)
    {
        int numberOfCalls;
        double bill;

        // Create a Scanner object to read input.
        Scanner console = new Scanner(System.in);

        // Get value from the user.
        System.out.print("Enter number of calls: ");
        numberOfCalls = console.nextInt();

        // Calculate bill.
        if (numberOfCalls <= 100)
        {
            bill = 200;
        }
        else if (numberOfCalls <= 150)
        {
            bill = 200 + (numberOfCalls - 100) * 0.60;
        }
        else if (numberOfCalls <= 200)
        {
            bill = 200 + 50 * 0.60
                    + (numberOfCalls - 150) * 0.50;
        }
        else
        {
            bill = 200 + 50 * 0.60 + 50 * 0.50
                    + (numberOfCalls - 200) * 0.40;
        }

        // Display bill.
        System.out.println("The bill is Rs. " + bill);
    }
}
```

Question 9

Grade Calculator

The marks obtained by a student in 3 different subjects are input by the user. Your program should calculate the average of subjects. 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

Question 10

Meaning of Grade

Write a program that prompts the user to enter grade. Your program should display the corresponding meaning of grade as per the following table

Grade	Meaning
A	Excellent
B	Good
C	Average
D	Deficient
F	Failing