```
class Q1Grade_Classification {
    public static void main(String[] args) {
        int score = 90;

        if (score >= 90) {
            System.out.println("A");
        } else if (score >= 80) {
            System.out.println("B");
        } else if (score >= 70) {
            System.out.println("C");
        } else if (score >= 60) {
            System.out.println("D");
        } else {
            System.out.println("F");
        }
    }
}
```

```
A
```

```
import java.util.Scanner;

public class Q2DaysOfWeek {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        System.out.print("Enter a number (1-7) for the day of the week: ");
        int day = scanner.nextInt();

        switch (day) {
            case 1:
```

```
case 2:
case 3:
case 4:
case 5:
   System.out.println("Weekday");
   switch (day) {
      case 1:
         System.out.println("Monday");
         break;
      case 2:
         System.out.println("Tuesday");
         break;
      case 3:
         System.out.println("Wednesday");
         break;
      case 4:
         System.out.println("Thursday");
         break;
      case 5:
         System.out.println("Friday");
         break;
   }
   break;
case 6:
case 7:
   System.out.println("Weekend");
   switch (day) {
      case 6:
         System.out.println("Saturday");
```

```
                break;
            case 7:
                System.out.println("Sunday");
                break;
        }
        break;
      default:
        System.out.println("Invalid input! Please enter a number between 1 and 7.");
        break;
    }

    scanner.close();
  }
}
```

```
Enter a number (1-7) for the day of the week: 4
Weekday
Thursday
```

```
import java.util.Scanner;

class Q3Calculator {
  public static void main(String[] args) {
    Scanner scanner = new Scanner(System.in);

    System.out.print("Enter first number: ");
    double num1 = scanner.nextDouble();

    System.out.print("Enter second number: ");
    double num2 = scanner.nextDouble();
```

```
System.out.print("Enter operator (+, -, *, /): ");
char operator = scanner.next().charAt(0);

double result;

switch (operator) {
    case '+':
        result = num1 + num2;
        System.out.println("Result: " + result);
        break;
    case '-':
        result = num1 - num2;
        System.out.println("Result: " + result);
        break;
    case '*':
        result = num1 * num2;
        System.out.println("Result: " + result);
        break;
    case '/':
        if (num2 != 0) {
            result = num1 / num2;
            System.out.println("Result: " + result);
        } else {
            System.out.println("Error: Division by zero is not allowed.");
        }
        break;
    default:
        System.out.println("Invalid operator");
```

```
            break;
        }

        scanner.close();
    }
}
```

```
Enter first number: 3
Enter second number: 2
Enter operator (+, -, *, /): +
Result: 5.0
```

```
import java.util.Scanner;

class Q4DiscountCalculation {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);

        System.out.print("Enter total purchase amount: ");
        double totalPurchase = scanner.nextDouble();

        System.out.print("Do you have a membership card? (yes/no): ");
        String hasMembership = scanner.next();

        double discount;
        if (totalPurchase >= 1000) {
            discount = 0.20;
        } else if (totalPurchase >= 500) {
            discount = 0.10;
        } else {
```

```
            discount = 0.05;
        }

        if (hasMembership.equalsIgnoreCase("yes")) {
            discount += 0.05;
        }

        double discountedAmount = totalPurchase - (totalPurchase * discount);
        System.out.println("Discounted amount: Rs." + discountedAmount);

        scanner.close();
    }
}
```

```
Enter total purchase amount: 900
Do you have a membership card? (yes/no): yes
Discounted amount: Rs.765.0
```

```
class Q5StudentPassFail {
    public static void main(String[] args) {
        int subject1 = 40; // Example grade for subject 1
        int subject2 = 45; // Example grade for subject 2
        int subject3 = 60; // Example grade for subject 3

        int failCount = 0;

        if (subject1 <= 40)
            failCount++;
        if (subject2 <= 40)
            failCount++;
```

```
        if (subject3 <= 40)
            failCount++;

        if (failCount == 0) {
            System.out.println("Student passes");
        } else {
            System.out.println("Student fails in " + failCount + " subjects");
        }
    }
}
```

```
Student fails in 1 subjects
```