Main.java

```java
import java.util.Scanner;

public class Main {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        System.out.print("Enter a string: ");
        String input = scanner.nextLine();
        scanner.close();

        int vowels = 0, consonants = 0, digits = 0, specialChars = 0;

        input = input.toLowerCase();

        for (char ch : input.toCharArray()) {
            if (Character.isLetter(ch)) {
                if ("aeiou".indexOf(ch) != -1) {
                    vowels++;
                } else {
                    consonants++;
                }
            } else if (Character.isDigit(ch)) {
                digits++;
            } else if (!Character.isWhitespace(ch)) {
                specialChars++;
            }
        }

        System.out.println("Vowels: " + vowels);
        System.out.println("Consonants: " + consonants);
        System.out.println("Digits: " + digits);
        System.out.println("Special Characters: " + specialChars);
    }
}
```

input

```
Enter a string: Vanshaj@19
Vowels: 2
Consonants: 5
Digits: 2
Special Characters: 1
```

```java
import java.util.Scanner;

class BankAccount {
    private String name;
    private String accountNumber;
    private double balance;

    public BankAccount(String name, String accountNumber, double balance) {
        this.name = name;
        this.accountNumber = accountNumber;
        this.balance = balance;
    }

    public void deposit(double amount) {
        if (amount > 0) {
            balance += amount;
            System.out.println("Deposit successful! Current Balance: " + balance);
        } else {
            System.out.println("Error: Deposit amount must be positive.");
        }
    }

    public void withdraw(double amount) {
        if (amount > 0 && amount <= balance) {
            balance -= amount;
            System.out.println("Withdrawal successful! Current Balance: " + balance);
        } else {
            System.out.println("Error: Insufficient funds. Current Balance: " + balance);
        }
    }
}
```

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

        System.out.println("Create Account:");
        System.out.print("Name: ");
        String name = scanner.nextLine();
        System.out.print("Account Number: ");
        String accountNumber = scanner.nextLine();
        System.out.print("Initial Balance: ");
        double initialBalance = scanner.nextDouble();

        BankAccount account = new BankAccount(name, accountNumber, initialBalance);

        while (true) {
            System.out.println("\nChoose an option: 1. Deposit 2. Withdraw 3. Exit");
            int choice = scanner.nextInt();

            if (choice == 1) {
                System.out.print("Enter deposit amount: ");
                double amount = scanner.nextDouble();
                account.deposit(amount);
            } else if (choice == 2) {
                System.out.print("Enter withdrawal amount: ");
                double amount = scanner.nextDouble();
                account.withdraw(amount);
            } else if (choice == 3) {
                System.out.println("Thank you for using the banking system!");
                break;
            } else {
                System.out.println("Invalid choice. Please try again.");
            }
        }
```

```
Create Account:
Name: vanshaj
Account Number: 123
Initial Balance: 1233

Choose an option: 1. Deposit 2. Withdraw 3. Exit
1
Enter deposit amount: 1
Deposit successful! Current Balance: 1234.0

Choose an option: 1. Deposit 2. Withdraw 3. Exit
3
Thank you for using the banking system!


...Program finished with exit code 0
Press ENTER to exit console.
```

```java
import java.util.Scanner;

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

        System.out.print("Enter number of rows and columns for matrices: ");
        int rows = scanner.nextInt();
        int cols = scanner.nextInt();

        int[][] matrix1 = new int[rows][cols];
        int[][] matrix2 = new int[rows][cols];

        System.out.println("Enter elements of Matrix 1:");
        inputMatrix(scanner, matrix1);

        System.out.println("Enter elements of Matrix 2:");
        inputMatrix(scanner, matrix2);

        System.out.println("Addition:");
        printMatrix(addMatrices(matrix1, matrix2));

        System.out.println("Subtraction:");
        printMatrix(subtractMatrices(matrix1, matrix2));

        System.out.println("Multiplication:");
        if (matrix1[0].length == matrix2.length) {
            printMatrix(multiplyMatrices(matrix1, matrix2));
        } else {
            System.out.println("Matrix multiplication is not possible.");
        }

        scanner.close();
    }
```

```java
public static void inputMatrix(Scanner scanner, int[][] matrix) {
    for (int i = 0; i < matrix.length; i++) {
        for (int j = 0; j < matrix[0].length; j++) {
            matrix[i][j] = scanner.nextInt();
        }
    }
}

public static int[][] addMatrices(int[][] matrix1, int[][] matrix2) {
    int rows = matrix1.length, cols = matrix1[0].length;
    int[][] result = new int[rows][cols];
    for (int i = 0; i < rows; i++) {
        for (int j = 0; j < cols; j++) {
            result[i][j] = matrix1[i][j] + matrix2[i][j];
        }
    }
    return result;
}

public static int[][] subtractMatrices(int[][] matrix1, int[][] matrix2) {
    int rows = matrix1.length, cols = matrix1[0].length;
    int[][] result = new int[rows][cols];
    for (int i = 0; i < rows; i++) {
        for (int j = 0; j < cols; j++) {
            result[i][j] = matrix1[i][j] - matrix2[i][j];
        }
    }
    return result;
}
```

```java
    public static int[][] multiplyMatrices(int[][] matrix1, int[][] matrix2) {
        int rows1 = matrix1.length, cols1 = matrix1[0].length;
        int cols2 = matrix2[0].length;
        int[][] result = new int[rows1][cols2];

        for (int i = 0; i < rows1; i++) {
            for (int j = 0; j < cols2; j++) {
                for (int k = 0; k < cols1; k++) {
                    result[i][j] += matrix1[i][k] * matrix2[k][j];
                }
            }
        }
        return result;
    }

    public static void printMatrix(int[][] matrix) {
        for (int[] row : matrix) {
            for (int num : row) {
                System.out.print(num + " ");
            }
            System.out.println();
        }
    }
}
```

```
Enter number of rows and columns for matrices: 2
2
Enter elements of Matrix 1:
1
2
3
4
Enter elements of Matrix 2:
1
3

45
5
Addition:
2 5
48 9
Subtraction:
0 -1
-42 -1
Multiplication:
91 13
183 29
```