```java
//to create a menu driven program
import java.util.Scanner;

public class NumberConverter
{                                                       //class starts
    public static void main()
{                                                       //main starts
        Scanner sc = new Scanner(System.in);

        while (true) {
            System.out.println("\nMenu:");
            System.out.println("1. Convert Hexadecimal to Decimal");
            System.out.println("2. Convert Decimal to Hexadecimal");
            System.out.println("3. Exit");
            System.out.print("Enter your choice: ");
            int choice = sc.nextInt();

            switch (choice) {
//choices provided to the user
                case 1:
                    convertHexToDecimal();
                    break;
                case 2:
                    convertDecimalToHex();
                    break;
                case 3:
                    System.out.println("Exiting...");
//to exit
                    sc.close();
                    return;
                default:
                    System.out.println("Invalid choice! Please enter a valid
option.");
            }
        }
    }

    public static void convertHexToDecimal() {
//converts hexa decimal to decimal
        Scanner sc = new Scanner(System.in);
        System.out.print("Enter a hexadecimal number: ");
        String hexString = sc.nextLine();
        try {
            int decimal = Integer.parseInt(hexString, 16);
            System.out.println("Decimal equivalent: " + decimal);
        } catch (NumberFormatException e) {
            System.out.println("Invalid hexadecimal number format!");
        }
    }

    public static void convertDecimalToHex() {
```

```
46          Scanner sc = new Scanner(System.in);
47          System.out.print("Enter a decimal number: ");
48          int decimal = sc.nextInt();
49          String hexString = Integer.toHexString(decimal);
50          System.out.println("Hexadecimal equivalent: " + hexString.toUpperCase());
51      }
    //class ends
52  }
    //main ends
53
```