Institute of Computer Technology

B. Tech. Computer Science and Engineering

Semester: III

Sub: Object-Oriented Programming

Course Code: 2CSE303

Practical Number:4

Objective:

To learn about switch case condition in java.

Q1. Find month name on the basis of user input month number (1 to 12).
Q2. Find weekday name on the basis of user input week-days number (1-7).
Q3. Check, whether the user number is even or odd.
Q4. Find highest and lowest number from the user input random three numbers.
Q5. Check whether the two String name is same or not.

Code :

```
import java.util.Scanner;


public class PracticalSwitchCase {


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


        do {
            System.out.println("Press <1> to find the month name by month number (1-12).");
            System.out.println("Press <2> to find the weekday name by weekday number (1-
7).");
            System.out.println("Press <3> to check whether the number is even or odd.");
            System.out.println("Press <4> to find the highest and lowest number among three
numbers.");
            System.out.println("Press <5> to check whether two strings are the same.");
            System.out.println("Press <6> to exit");
```

```
        System.out.print("Enter your choice: ");
        choice = scanner.nextInt();

        switch (choice) {
            case 1:
                findMonthName(scanner);
                break;
            case 2:
                findWeekdayName(scanner);
                break;
            case 3:
                checkEvenOdd(scanner);
                break;
            case 4:
                findHighestLowest(scanner);
                break;
            case 5:
                compareStrings(scanner);
                break;
            case 6:
                System.out.println("Exiting program.");
                break;
            default:
                System.out.println("Invalid choice! Please try again.");
        }

        System.out.println();  // Add a newline for better readability between operations

    } while (choice != 6);
```

```
        scanner.close();
    }

    // Case 1: Find month name by month number
    private static void findMonthName(Scanner scanner) {
        System.out.print("Enter a month number (1-12): ");
        int month = scanner.nextInt();

        String monthName;
        switch (month) {
            case 1:  monthName = "January"; break;
            case 2:  monthName = "February"; break;
            case 3:  monthName = "March"; break;
            case 4:  monthName = "April"; break;
            case 5:  monthName = "May"; break;
            case 6:  monthName = "June"; break;
            case 7:  monthName = "July"; break;
            case 8:  monthName = "August"; break;
            case 9:  monthName = "September"; break;
            case 10: monthName = "October"; break;
            case 11: monthName = "November"; break;
            case 12: monthName = "December"; break;
            default: monthName = "Invalid month number!"; break;
        }
        System.out.println("Month: " + monthName);
    }

    // Case 2: Find weekday name by weekday number
    private static void findWeekdayName(Scanner scanner) {
        System.out.print("Enter a weekday number (1-7): ");
        int day = scanner.nextInt();
```

```
    String dayName;
    switch (day) {
        case 1:  dayName = "Sunday"; break;
        case 2:  dayName = "Monday"; break;
        case 3:  dayName = "Tuesday"; break;
        case 4:  dayName = "Wednesday"; break;
        case 5:  dayName = "Thursday"; break;
        case 6:  dayName = "Friday"; break;
        case 7:  dayName = "Saturday"; break;
        default: dayName = "Invalid weekday number!"; break;
    }
    System.out.println("Day: " + dayName);
}

// Case 3: Check whether the number is even or odd
private static void checkEvenOdd(Scanner scanner) {
    System.out.print("Enter a number to check if it's even or odd: ");
    int number = scanner.nextInt();

    switch (number % 2) {
        case 0:
            System.out.println("The number is even.");
            break;
        case 1:
            System.out.println("The number is odd.");
            break;
        default:
            System.out.println("Error: Invalid input.");
            break;
    }
```

```
    }

    // Case 4: Find the highest and lowest number among three numbers
    private static void findHighestLowest(Scanner scanner) {
        System.out.print("Enter three numbers: ");
        int num1 = scanner.nextInt();
        int num2 = scanner.nextInt();
        int num3 = scanner.nextInt();

        int highest, lowest;

        // Finding the highest number
        if (num1 >= num2 && num1 >= num3) {
            highest = num1;
        } else if (num2 >= num1 && num2 >= num3) {
            highest = num2;
        } else {
            highest = num3;
        }

        // Finding the lowest number
        if (num1 <= num2 && num1 <= num3) {
            lowest = num1;
        } else if (num2 <= num1 && num2 <= num3) {
            lowest = num2;
        } else {
            lowest = num3;
        }

        System.out.println("Highest number: " + highest);
        System.out.println("Lowest number: " + lowest);
```

```
    }

    // Case 5: Check whether two strings are the same
    private static void compareStrings(Scanner scanner) {
        scanner.nextLine();  // Consume the newline character
        System.out.print("Enter the first string: ");
        String str1 = scanner.nextLine();
        System.out.print("Enter the second string: ");
        String str2 = scanner.nextLine();

        if (str1.equals(str2)) {
            System.out.println("The strings are the same.");
        } else {
            System.out.println("The strings are different.");
        }
    }
}
```

Output :

Press <1> to find the month name by month number (1-12).

Press <2> to find the weekday name by weekday number (1-7).

Press <3> to check whether the number is even or odd.

Press <4> to find the highest and lowest number among three numbers.

Press <5> to check whether two strings are the same.

Press <6> to exit

Enter your choice: 1

Enter a month number (1-12): 4

Month: April

Press <1> to find the month name by month number (1-12).

Press <2> to find the weekday name by weekday number (1-7).

Press <3> to check whether the number is even or odd.

Press <4> to find the highest and lowest number among three numbers.

Press <5> to check whether two strings are the same.

Press <6> to exit

Enter your choice: 2

Enter a weekday number (1-7): 4

Day: Wednesday

Press <1> to find the month name by month number (1-12).

Press <2> to find the weekday name by weekday number (1-7).

Press <3> to check whether the number is even or odd.

Press <4> to find the highest and lowest number among three numbers.

Press <5> to check whether two strings are the same.

Press <6> to exit

Enter your choice: 3

Enter a number to check if it's even or odd: 4

The number is even.

Press <1> to find the month name by month number (1-12).

Press <2> to find the weekday name by weekday number (1-7).

Press <3> to check whether the number is even or odd.

Press <4> to find the highest and lowest number among three numbers.

Press <5> to check whether two strings are the same.

Press <6> to exit

Enter your choice: 4

Enter three numbers: 4 5 6

Highest number: 6

Lowest number: 4

Press <1> to find the month name by month number (1-12).

Press <2> to find the weekday name by weekday number (1-7).

Press <3> to check whether the number is even or odd.

Press <4> to find the highest and lowest number among three numbers.

Press <5> to check whether two strings are the same.

Press <6> to exit

Enter your choice: 5

Enter the first string: hii

Enter the second string: hee

The strings are different.

Press <1> to find the month name by month number (1-12).

Press <2> to find the weekday name by weekday number (1-7).

Press <3> to check whether the number is even or odd.

Press <4> to find the highest and lowest number among three numbers.

Press <5> to check whether two strings are the same.

Press <6> to exit

Enter your choice: 6

Exiting program.