

OOP LAB_03

BS (CS/SE)

Lab #03

Objective:

The objective of this lab is to familiarize students with Control Statements in java

Task 1:

Write some code that prints the even numbers from 2 to 20 (inclusive) using a for loop.
Can you do this in two different ways?

Task 2:

Squares

Write a program that displays the numbers from 1 to 10 and their squares.

e.g.

1	-->	1
2	-->	4
3	-->	9
4	-->	16
5	-->	25
6	-->	36
7	-->	49
8	-->	64
9	-->	81
10	-->	100

Task 3:

Write java code to print multiplication table of any number that the user has input

Task 4:

Write java code to test how many even numbers are present in n numbers, and also display their total.

Task 5:

Write java program to compute factorial of a given number.

Task 6:

Use nested loop to generate output like shown below:

e.g.

```
Week 1
    Day 1
    Day 2
    Day 3
    Day 4
    Day 5
    Day 6
    Day 7
Week 2
    Day 1
    Day 2
    Day 3
    Day 4
    Day 5
    Day 6
    Day 7
Week 3
    Day 1
    Day 2
    Day 3
    Day 4
    Day 5
    Day 6
    Day 7
Week 4
    Day 1
    Day 2
    Day 3
    Day 4
    Day 5
    Day 6
    Day 7
```

Task 7:

Rock Around The Clock

Write a program that simulates the hours and minutes passing on a clock.

e.g.

```
01:00
01:01
01:02
01:03
01:04
01:05
01:06
01:07
01:08
01:09
01:10
01:11
01:12
01:13
01:14
```

...

```
03:55
03:56
03:57
```

Task 8:

Activities at Lake LazyDays As activity directory at Lake LazyDays Resort, it is your job to suggest appropriate activities to guests based on the weather:

temp \geq 80: swimming

60 \leq temp < 80 tennis

40 \leq temp < 60 golf

temp < 40 skiing

1. Write a program that prompts the user for a temperature, then prints out the activity appropriate for that temperature. Use a cascading if, and be sure that your conditions are no more complex than necessary.
2. Modify your program so that if the temperature is greater than 95 or less than 20, it prints "Visit our shops!". (Hint: Use a boolean operator in your condition.) For other temperatures print the activity as before.

Task 9: Do this task using both while and do while loops

Test Average problem:

- As long as there are more grades, add them to the total
- Divide the total by the number of courses (each grade is a course)
- Print the corresponding letter grade
- Stop when the user enters a negative grade

Task 10:

Use switch statement to find out maximum between two Numbers

Task 11:

Write a program to check whether an alphabet is consonant or vowel using switch case statements

Task 12:

- A. Create array for students marks, Grades and names
- B. Take input of each student's name, marks and grade from the user and store information in array
- C. Display the Result in a Tabular form
- D. Use for each to Do the C part again