

## Standard Template for Academic Tasks (22232)



Faculty Name and UID: Girish Kumar

UID: 21706

Academic Task Number: CA-1

Course code: CAP680

Course Title Programme: Programming in JAVA (Lab)

Maximum Marks: 50

Academic Task Type: Assignment 4

Reg.No : 12207313

Roll No : 26

Section : D2214

Name : Himanshu singh

Date of Allotment: 20-Feb-2023

Group : G1

Last Date of submission: 26-Feb-2023

Set: Even

| Question Number | Question Statement  | Course Outcome | Bloom's level | Marks per Question |
|-----------------|---|----------------|---------------|--------------------|
| 1               | <p>Suppose you are working as a Gym trainer and you want to calculates and displays a person's body mass index (BMI). The BMI is often used to determine whether a person lifestyle is overweight or under weight . A person's BMI is calculated with the following formula:</p> <p>BMI = weight * 703/height^2</p> <p>where weight is measured in pounds and height is measured in inches. Display a message indicating whether the person</p> | CO1            | L6            | 50                 |

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|  |   |  |  |  |
|--|---|--|--|--|
|  | has optimal weight, is underweight, or is overweight. A sedentary person's weight is considered to be optimal if his or her BMI is between 18.5 and 25. If the BMI is less than 18.5, the person is considered to be underweight. If the BMI value is greater than 25, the person is considered to be overweight. |  |  |  |
|--|---|--|--|--|

### Code :

```
import java.util.Scanner;

public class calQ4 {
    public static void main(String[] args) {
        Scanner input = new Scanner(System.in);

        System.out.print("Enter weight in pounds: ");
        double weight = input.nextDouble();

        System.out.print("Enter height in inches: ");
        double height = input.nextDouble();

        double bmi = (weight * 703) / (height * height);

        System.out.println("BMI: " + bmi);

        if (bmi < 18.5) {
            System.out.println("Underweight");
        } else if (bmi >= 18.5 && bmi <= 25) {
            System.out.println("Optimal weight");
        } else {
            System.out.println("Overweight");
        }
    }
}
```

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```
}  
}
```

## Output :

```
"C:\Program Files\Java\jdk-19\bin\java.exe" "-javaagent:C:\Program  
Enter weight in pounds: 55  
Enter height in inches: 5.6  
BMI: 1232.9400510204084  
Overweight  
  
Process finished with exit code 0
```