Day 59 coding Statement : Body Mass Index

You are given the height H (in metres) and mass M (in kilograms) of Anusree. The Body Mass Index (BMI) of a person is computed as M/H^2.

Report the category into which Anusree falls, based on his BMI:

Category 1: Underweight if BMI ≤18

Category 2: Normal weight if BMI ∈{19, 20,…, 24}

Category 3: Overweight if BMI ∈{25, 26,…, 29}

Category 4: Obesity if BMI ≥30

Input:

Each testcase contains a single line of input, with two space separated integers, M,H, which denote the mass and height of Anusree respectively.

Output:

For each testcase, output in a single line, 1,2,3 or 4, based on the category in which Anusree falls.

Sample Input:

72 2

80 2

120 2

Sample Output:

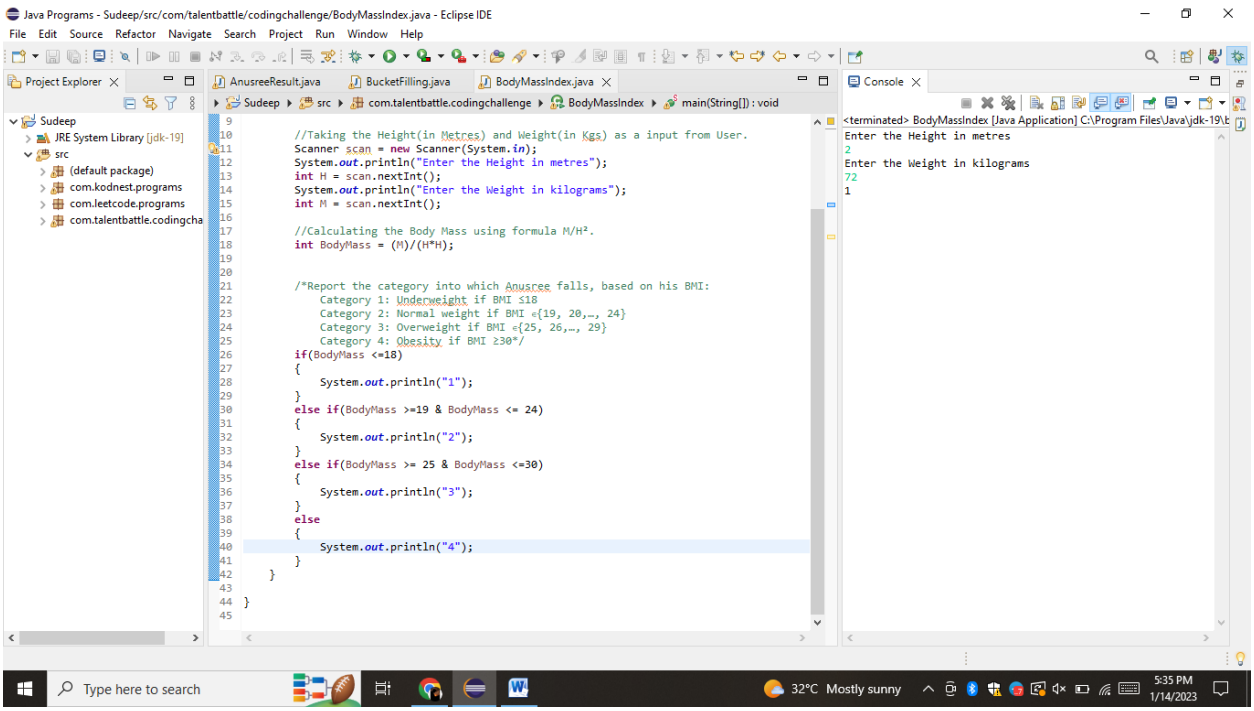
1

2

4

Program :

```
package com.talentbattle.codingchallenge;

import java.util.Scanner;

public class BodyMassIndex {

	public static void main(String[] args) {
		// TODO Auto-generated method stub

		//Taking the Height(in Metres) and Weight(in Kgs) as a input from User.
		Scanner scan = new Scanner(System.in);
		System.out.println("Enter the Height in metres");
		int H = scan.nextInt();
		System.out.println("Enter the Weight in kilograms");
		int M = scan.nextInt();

		//Calculating the Body Mass using formula M/H².
		int BodyMass = (M)/(H*H);


		/*Report the category into which Anusree falls, based on his BMI:
			Category 1: Underweight if BMI ≤18
			Category 2: Normal weight if BMI ∈{19, 20,…, 24}
			Category 3: Overweight if BMI ∈{25, 26,…, 29}
			Category 4: Obesity if BMI ≥30*/
		if(BodyMass <=18)
		{
			System.out.println("1");
		}
		else if(BodyMass >=19 & BodyMass <= 24)
		{
			System.out.println("2");
		}
		else if(BodyMass >= 25 & BodyMass <=30)
		{
			System.out.println("3");
		}
		else
		{
			System.out.println("4");
		}
	}

}
```


Java Programs - Sudeep/src/com/talentbattle/codingchallenge/BodyMassIndex.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
Project Explorer
Sudeep
JRE System Library [jdk-19]
src
(default package)
com.kodnest.programs
com.leetcode.programs
com.talentbattle.codingcha
AnusreeResult.java
BucketFilling.java
BodyMassIndex.java
Sudeep ▸ src ▸ com.talentbattle.codingchallenge ▸ BodyMassIndex ▸ main(String[]) : void
9
10 //Taking the Height(in Metres) and Weight(in Kgs) as a input from User.
11 Scanner scan = new Scanner(System.in);
12 System.out.println("Enter the Height in metres");
13 int H = scan.nextInt();
14 System.out.println("Enter the Weight in kilograms");
15 int M = scan.nextInt();
16
17 //Calculating the Body Mass using formula M/H².
18 int BodyMass = (M)/(H*H);
19
20
21 /*Report the category into which Anusree falls, based on his BMI:
22 Category 1: Underweight if BMI ≤18
23 Category 2: Normal weight if BMI ∈{19, 20,…, 24}
24 Category 3: Overweight if BMI ∈{25, 26,…, 29}
25 Category 4: Obesity if BMI ≥30*/
26 if(BodyMass <=18)
27 {
28 System.out.println("1");
29 }
30 else if(BodyMass >=19 & BodyMass <= 24)
31 {
32 System.out.println("2");
33 }
34 else if(BodyMass >= 25 & BodyMass <=30)
35 {
36 System.out.println("3");
37 }
38 else
39 {
40 System.out.println("4");
41 }
42 }
43
44 }
45
Console
<terminated> BodyMassIndex [Java Application] C:\Program Files\Java\jdk-19\b
Enter the Height in metres
2
Enter the Weight in kilograms
72
1
Type here to search
32°C Mostly sunny
5:35 PM
1/14/2023