Rajalakshmi Engineering College

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Batch: 2028
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Scan to verify results

2024_28_III_OOPS Using Java Lab

2028_REC_OOPS using Java_Week 2_Q1

Attempt : 1
Total Mark : 10
Marks Obtained : 10

Section 1 : Coding

1. Problem Statement

Arun is working on a project to automate the process of determining whether a student has passed or failed based on their subject marks.

He aims to create a simple program that takes positive integers as marks for five subjects from the user. If the average of the marks is greater than or equal to 50, the student has passed the exam. Otherwise, the student has failed.

Help Arun to implement the project.

Input Format

The input consists of five space-separated integers, representing the marks in five subjects.

Output Format

The first line of output prints "Average score: " followed by an integer representing the average score.

The second line prints one of the following:

1. If the condition is satisfied, print "The student has passed".
2. Otherwise, the output prints "The student has failed".

Refer to the sample output for formatting specifications.

Sample Test Case

Input: 50 60 70 80 90

Output: Average score: 70
The student has passed

Answer

```java
// You are using Java
import java.util.*;
class Main {
    public static void main(String args[]) {
        Scanner sc = new Scanner(System.in);
        int a[] = new int[5];
        int s = 0;

        for (int i = 0; i < 5; i++) {
            a[i] = sc.nextInt();
            s += a[i];
        }
        int avg = s / 5;

        System.out.println("Average score: "+avg);
        String output = (avg >= 50) ? "The student has passed" : "The student has
failed";

        System.out.println(output);

    }
```

```
    }
```

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2024_28_III_OOPS Using Java Lab

2028_REC_OOPS using Java_Week 2_Q2

Attempt : 1
Total Mark : 10
Marks Obtained : 10

Section 1 : Coding

1. Problem Statement

Samantha is a diligent math student who is exploring the world of programming. She is learning Java and has recently studied conditional statements. One day, her teacher gives her an interesting problem to solve, which takes a number as input and checks whether it is a multiple of 5 or 7.

Help her complete the task.

Input Format

The input consists of a single integer N, representing the number to be checked.

Output Format

If the number is a multiple of 5 but not 7, the output prints "N is a multiple of 5".

If the number is a multiple of 7, the output prints "N is a multiple of 7".

Otherwise the output prints "N is neither multiple of 5 nor 7" where N is an entered integer.

Refer to the sample output for formatting specifications.

Sample Test Case

Input: 10
Output: 10 is a multiple of 5

Answer

```
import java.util.*;
class Main {
    public static void main(String args[]) {
        Scanner sc = new Scanner(System.in);
        int n = sc.nextInt();

        if (n % 5 == 0) {
            System.out.print(n +" is a multiple of 5");
        } else if (n % 7 == 0) {
            System.out.print(n +" is a multiple of 7");
        } else
        System.out.print(n+" is neither multiple of 5 nor 7");
    }
}
```

Status : Correct   *Marks : 10/10*

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2024_28_III_OOPS Using Java Lab

2028_REC_OOPS using Java_Week 2_Q7

Attempt : 1
Total Mark : 10
Marks Obtained : 10

Section 1 : Coding

1.   Problem Statement

You are taking part in a coding challenge where your task is to design a program that conjures a mesmerizing numerical pyramid pattern. The enchanting pattern is fashioned using a for loop and is customized based on user input.

Participants are prompted to unveil the pyramid's magic by specifying its height - essentially dictating the number of rows in this spellbinding creation.

Write a program that employs to weave this captivating numerical pyramid as shown below.

Example

Input:

4

Output:

Input Format

The input consists of a positive integer n representing the number of rows in the pattern.

Output Format

The output prints the required pyramid pattern, as shown in the sample output.

Refer to the sample output for the formatting specifications.

Sample Test Case

Input: 4

Output: 1
 123
 12345
1234567

Answer

```java
import java.util.*;
class Main {
    public static void main(String args[]) {
        Scanner sc = new Scanner(System.in);
        int n = sc.nextInt();

        for (int i = 1; i <= n; i++) {
            for (int j = 1; j <= n-i; j++) {
                System.out.print(" ");
            }
            for (int k = 1; k <= 2*i-1; k++) {
                System.out.print(k);
            } System.out.println();
        }
```

```
    }
}
```

Status : Correct   *Marks : 10/10*