

# LP\_Practice\_digitSum

Sasi | 09 Feb 2023



Finish State: Normal

Test Taken on: February 09, 2023 09:16:28 AM IST



Sasi

sasidevi.s.2020.cse@ritchennai.edu.in

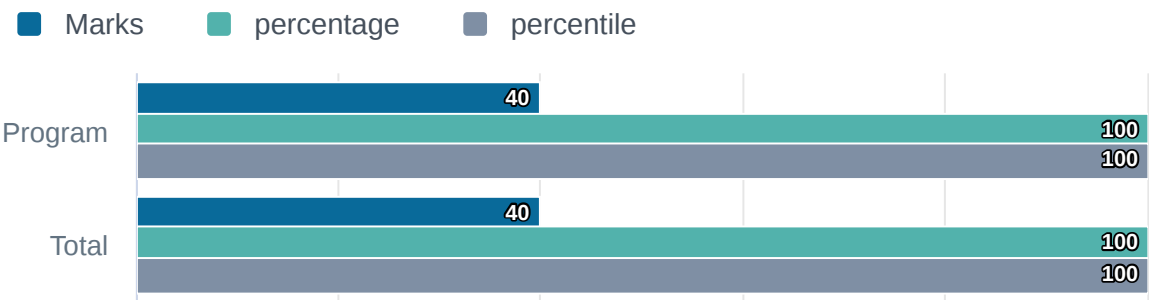
Overall Summary

40 Marks Scored  
out of 40

100 % 100 percentile  
out of 52995 Test Takers

6m 13s Time taken  
of 1hr 5mins

Marks Scored



Attempt Summary

Distribution of questions attempted in a total of 1 question(s).



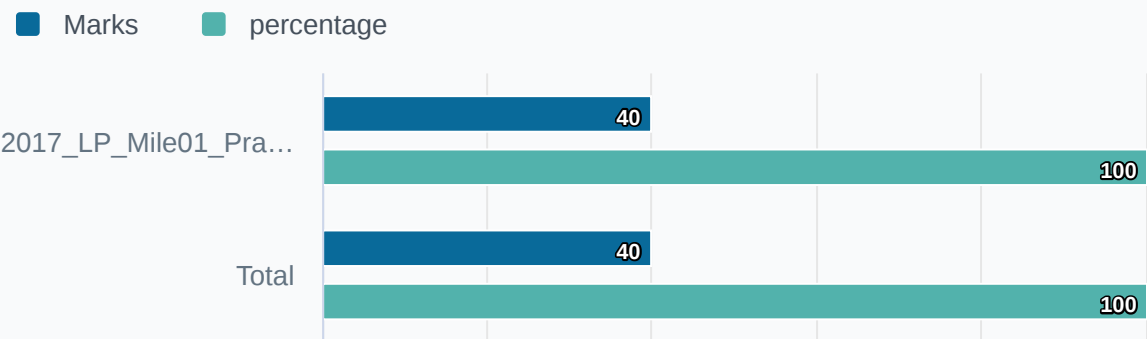
This shows the correctness of questions attempted by the test taker

Correct	1 Ques	40/40 Marks
Incorrect	0 Ques	0/0 Marks
Partially Correct	0 Ques	0/0 Marks
Not Attempted	0 Ques	0/0 Marks

Section-Wise Details

▼ Section 1 Program	question(s) 1 Q.	Time taken 6m 13s (Untimed)	Marks Scored 40 / 40
---------------------------	---------------------	--------------------------------	-------------------------

Marks Scored



Attempt Summary

Distribution of questions attempted in a total of 1 question(s).




■ Correct	1 Ques	40/40 Marks
-----------	--------	-------------

This shows the correctness of questions attempted by the test taker


Test Log

9th Feb 2023

- 09:08 AM



Started the test with Program
- 09:14 AM



Finished the test

## About the Report

This Report is generated electronically on the basis of the inputs received from the assessment takers. This Report including the AI flags that are generated in case of availing of proctoring services, should not be solely used/relied on for making any business, selection, entrance, or employment-related decisions. Mettl accepts no liability from the use of or any action taken or refrained from or for any and all business decisions taken as a result of or reliance upon anything, including, without limitation, information, advice, or AI flags contained in this Report or sources of information used or referred to in this Report.



1. Program

## Question 1

🔖 Revisit Later

## How to Attempt?

**digitSum:** The labels on a trader's boxes display a large number (integer). The trader wants to label the boxes with a single digit ranging from 1 to 9. He decides to perform digit sum on this large number, continuously till he gets a single digit number.

**NOTE:** In mathematics, the "digit sum" of a given integer is the sum of all its digits, (e.g.: the digit sum of 84001 is calculated as  $8+4+0+0+1 = 13$ , the digit sum of 13 is  $1+3 = 4$ ).

Write a function (method) that takes as input a large number and returns a single digit by performing continuous digitSum on this number, and on the resulting numbers, till the resulting number is a single digit number in the range 1 to 9.

**Example 1:** If the large number whose single-digit digitSum is to be found is 976592, the process is as below –  
 $9+7+6+5+9+2 = 38$

 $3+8 = 11$  $1+1 = 2$ 

Thus, the single-digit digitSum for the number 976592 is 2.

**Example 2:** If the large number whose single-digit digitSum is to be found is 123456, the process is as below –  
 $1+2+3+4+5+6 = 21$

 $2+1 = 3$ 

Thus, the single-digit digitSum for the number 123456 is 3.

For negative numbers, the result should also be in negative.

**Example 3:** If the large number whose single-digit digitSum is to be found is -123456, the answer would be -3.

JAVA7

Compiler: Java - 1.7

```
1 import java.io.*;
2 import java.util.*;
3
4 // Read only region start
5 class UserMainCode
6 {
7
8     public int digitSum(int input1){
9         // Read only region end
10         int neg=input1;
11         if(input1<0)
12         {
13             input1*=-1;
14         }
15         int len=Integer.toString(input1).length();
16         if(len==1)
17         {
18             if(neg<0)
19                 return input1*-1;
20             else
21                 return input1;
22         }
23         else
24         {
25             int sum=0;
26             while(input1!=0)
27             {
28                 int rem=input1%10;
29                 sum+=rem;
30                 input1/=10;
31             }
32             if(neg<0)
33                 return digitSum(sum*-1);
34             else
35                 return digitSum(sum);
36         }
37     }
```

☐ Use Custom Input

Compile and Test

Submit Code