

Problem Set 1 Exercise #12: Magic Digit

Reference: Lecture 2 notes

Learning objectives: Writing methods; Division and modulo operators

Estimated completion time: 25 minutes

Problem statement:

Write a program **PS1_Ex12_MagicDigit.java** to read two positive integers of exactly 5 digits each, and for each integer, add up the digits (from right) in positions 1, 3 and 5. The right-most digit of the sum is the required answer.

For example, if the input is **76524**, then adding up the digits 4, 5 and 7, we get **16**. The answer is hence 6.

Your program should contain a method **getMagic()** to compute and return the answer.

Sample run #1:

```
Enter 1st number: 76524
Magic digit = 6
Enter 2nd number: 12345
Magic digit = 9
```

Sample run #2:

```
Enter 1st number: 11111
Magic digit = 3
Enter 2nd number: 99999
Magic digit = 7
```