

Problem Set 1 Exercise #11: Magic Digit

Reference: Week 3 Lecture notes

Learning objective: Writing functions; Division and modulo operators

Estimated completion time: 20 minutes

Problem statement:

Write a program **`magic_digit.c`** 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 function **`get_magic()`** to compute and return the answer back to **`main()`**.

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
```