



CS102/IT102-Computer Programming 1
Programming Exercise 9
1st Semester 2023-2024

Write a program that will read each integer from the file "integers.txt" then counts the frequency of each digit (0-9) in the integer, until it encounters 0. It should ignore all the integers after 0. Define and use a recursive function that will have as parameters the integer and the digit whose number of occurrence will be counted, and returns that count. Output on the screen all the integers read from the file (excluding 0) and the frequency of each digit (0-9) in each integer. All the reading and printing tasks should be handled by the **main()** function only.

Sample content of the file "integers.txt":

```
10200
-1392
6044
-17080
2080050
0
4547
12567
```

Sample output on the screen:

INTEGER	0s	1s	2s	3s	4s	5s	6s	7s	8s	9s
10200	3	1	1	0	0	0	0	0	0	0
-1392	0	1	1	1	0	0	0	0	0	1
6044	1	0	0	0	2	0	1	0	0	0
-17080	2	1	0	0	0	0	0	1	1	0
2080050	4	0	1	0	0	1	0	0	1	0