

Write a program that will read all the integers from the file "**integers.in**" then counts the frequency of each digit **X** from 1 to 9 in each integer. Output on the screen and write into a file "**count.out**" all the integers read from the file together with frequency of each digit in the integer. Write a recursive function that will count the number of occurrence of a digit X from a given integer N (i.e. digit X and integer N will be the parameters in your function, and it will return the count/frequency). All the reading and printing tasks should be handled by the **main()** function only.

Sample content of input file "integers.in"

```
10200
-1392
6044
-17080
2080050
```

Sample output on the screen and on output file "count.out"

INTEGER	0	1	2	3	4	5	6	7	8	9
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	0	0	0	1	0	0	1	0