

Name-Surname: ID:

INTRODUCTION TO PROGRAMMING

LAB EXERCISE SET 12

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PROBLEM A

Write a program to read the provided file named `input.txt`, convert the first character of each line to capital, save the result in the file named `output.txt`.

input.txt	output.txt
happy birthday iPad Microsoft 365 days (python)	Happy birthday IPad Microsoft 365 days (python)

PROBLEM B

Write a program that asks the user to enter the name of a text file and then prints out the content of that file on the screen. If the file with the given name does not exist, output "ERROR: File not found"

PROBLEM C

Write a program that asks the user to enter two numbers and then output the sum of the two numbers. If the user enters a string that is not a number, output an error message and ask the user to re-enter.

```
Enter a number: sad
ERROR: Invalid input
Enter a number: 3 8
ERROR: Invalid input
Enter a number: 127.0.0.1
ERROR: Invalid input
Enter a number: 32.5
Enter another number: -2
The sum is 30.5
```

PROBLEM D

You are asked to write a program which can check for a misspelled word in a text file. The program reads the name of a text file from the user and then prints out each misspelled word in the file. The program should also output the line number that each misspelled word is located. If the given file cannot be opened the program should output an error message and terminate.

Your program can check whether a word is correctly spelled or not by checking whether appears in the provided dictionary file **dict.txt**. You may assume that every word in the dictionary **dict.txt** is no longer than 16 characters.

Note: To simplify the task, you may assume that the file to be spell checked does not contain any character other than English letters and the following symbols: full stop (.) and comma (,). You may assume that each line of the given text file is no longer than 1,000 characters.

Example

Enter a filename: blahblah.txt Error: Cannot open the file
Enter a filename: myData.txt Line 1: disipline Line 3: depoyment Line 3: SE Line 8: nowadays Line 9: govened Line 14: programmming Line 21: methudologies Line 22: maner

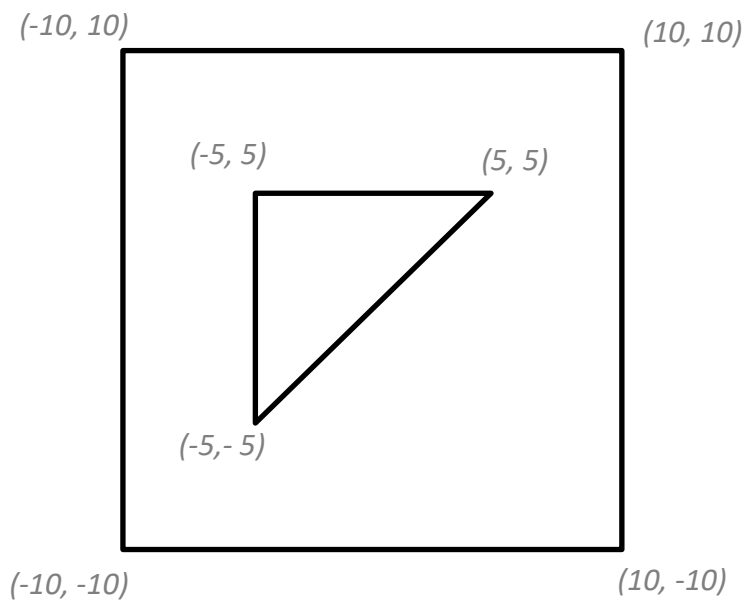
PROBLEM E

You are given a file containing the description of a line drawing. The line drawing consists of a number of line segments, given by a sequence of (x,y) coordinates.

For example, the following description is for the line drawing show below. Note that an empty line in the file indicates the start of a new component of the line drawing.

```
10, -10  
10, 10  
-10, 10  
-10, -10  
10, -10
```

```
5, 5  
-5, -5  
-5, 5  
5, 5
```



The name of the provided file is “picture.txt”. You are to write a program to read this file and use the turtle library to plot the drawing on the screen.