CENG 103
Computer Programming 1
HOMEWORK 2

In this homework, you will apply problem solving methodology for the following problem.

You will write a program that firstly gets a value from the user that will keep the number of digits included in entered number.

User can exit your program by entering a sentinel value (e.g. -1, you can choose different characters to make this, search about it.)

The program can distinguish type of entered number that can be your student number, your phone number or any number and asks the next questions by regarding this type, like that:

> *If number of digits is equal to ten*
> *Print Enter i. digit of your **phone number**:*

(i shows index 0-9 for 10)

The program can get value of each digit, calculate and print total value of these entered digits.

The program can repeat this progress until the user enter a sentinel value.

Test your program with **your own student/phone number** and take screenshot of the your output window as in the following page, put this image in your homework document.

At the end of implementation, the output window should be like the following output example, do not ignore any detail to get full marks:

Good luck!

```
                     C:\Users\baha\Documents\hw2.exe              –  □  ×

 Enter the number of digits in your number, -1 to end:
 (This number can be student number, phone number etc.):
        8
 Enter 0. digit of your student number:1
 Enter 1. digit of your student number:3
 Enter 2. digit of your student number:5
 Enter 3. digit of your student number:1
 Enter 4. digit of your student number:0
 Enter 5. digit of your student number:5
 Enter 6. digit of your student number:1
 Enter 7. digit of your student number:3

Total of digits: 19

 Enter the number of digits in your number, -1 to end:
 (This number can be student number, phone number etc.):
        10
 Enter 0. digit of your phone number:5
 Enter 1. digit of your phone number:4
 Enter 2. digit of your phone number:3
 Enter 3. digit of your phone number:5
 Enter 4. digit of your phone number:5
 Enter 5. digit of your phone number:5
 Enter 6. digit of your phone number:0
 Enter 7. digit of your phone number:0
 Enter 8. digit of your phone number:0
 Enter 9. digit of your phone number:0

Total of digits: 27

 Enter the number of digits in your number, -1 to end:
 (This number can be student number, phone number etc.):
        2
 Enter 0. digit of any number:1
 Enter 1. digit of any number:5

Total of digits: 6

 Enter the number of digits in your number, -1 to end:
 (This number can be student number, phone number etc.):
        -1

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Process exited after 97.92 seconds with return value 0
Press any key to continue . . .
```

IMPORTANT:

- Make sure that your files are named in correct format.
- Please make a good design. The code should be properly written such that unnecessary information should be prevented.
- Use pre-defined methods if you need.

• Try to use whatever you learned about C programming until now in your codes.
• All requirements should be met.
• This homework should be done individually.
• Please do it on your own, you can read tutorials and forums, many examples exist on the internet.
• You should be sure to understand whatever you write in your code, we will randomly select and ask you to describe your code.
• For your questions, use mailgroup. Ask to everybody so that everybody sees the answers. No private mails for the homework please.
• Cheating is forbidden, no excuse will be accepted.