



National University of Modern Languages

Artificial Intelligence - LAB

Lab # 4

BSSE 5(M)

Submitted By:

Muhammad Umair (12093)

Submitted To:

Sir Faiq

TASK 1

Write Python Program to Calculate the Length of a String,
Without Using Built-In len() Function.

TASK 2

Write a program that creates a list of 10 random integers. Then create two lists
by name odd_list and even_list that have all odd and even values
of the list respectively.

TASK 1

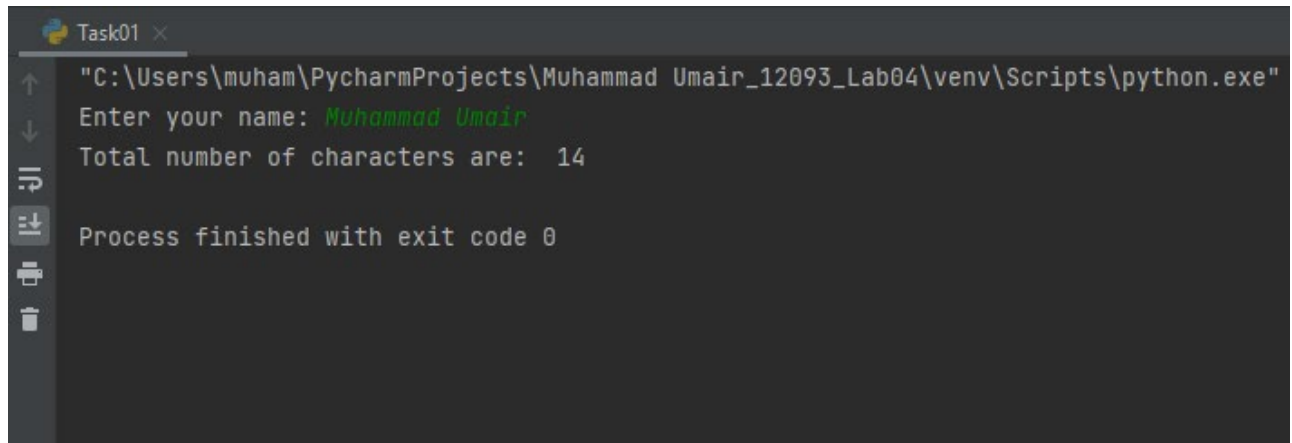
Code:

```
sen = str(input("Enter your name: "))

def calc_char(sen) -> int:
    ch = 0
    for i in sen:
        ch = ch + 1
    return ch

print("Total number of characters are: ", calc_char(sen))
```

Output:

A screenshot of a Python terminal window titled "Task01". The window shows the execution of a Python script. The first line is the file path: "C:\Users\muham\PycharmProjects\Muhammad Umair_12093_Lab04\venv\Scripts\python.exe". The second line is the prompt "Enter your name:" followed by the input "Muhammad Umair" in green. The third line is the output "Total number of characters are: 14". The fourth line is the message "Process finished with exit code 0". The terminal has a dark background and a light-colored text. On the left side, there is a vertical toolbar with icons for running, debugging, and other actions.

```
Task01 x
"C:\Users\muham\PycharmProjects\Muhammad Umair_12093_Lab04\venv\Scripts\python.exe"
Enter your name: Muhammad Umair
Total number of characters are: 14
Process finished with exit code 0
```

TASK 2

Code:

```
import random
rand_list = []
even_list = []
odd_list = []

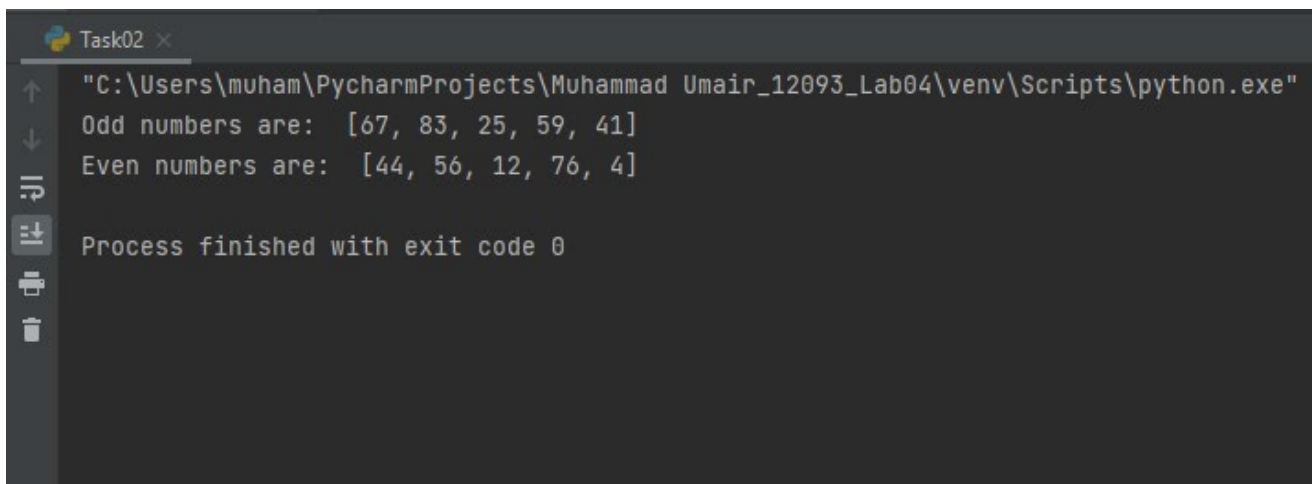
def input_list():
    for i in range(10):
        r = random.randint(1, 100)
        rand_list.append(r)

def sort_list():
    for j in rand_list:
        if (j % 2) == 0:
            even_list.append(j)
        else:
            odd_list.append(j)

def show_list():
    print("Odd numbers are: ", odd_list)
    print("Even numbers are: ", even_list)

input_list()
sort_list()
show_list()
```

Output:



```
Task02 x
"C:\Users\muham\PycharmProjects\Muhammad Umair_12093_Lab04\venv\Scripts\python.exe"
Odd numbers are: [67, 83, 25, 59, 41]
Even numbers are: [44, 56, 12, 76, 4]
Process finished with exit code 0
```