

# LAB ASSIGNMENT 1

Author: Avasarala Ratnavalli Class ID: 5

Objective: To implement basic python codes

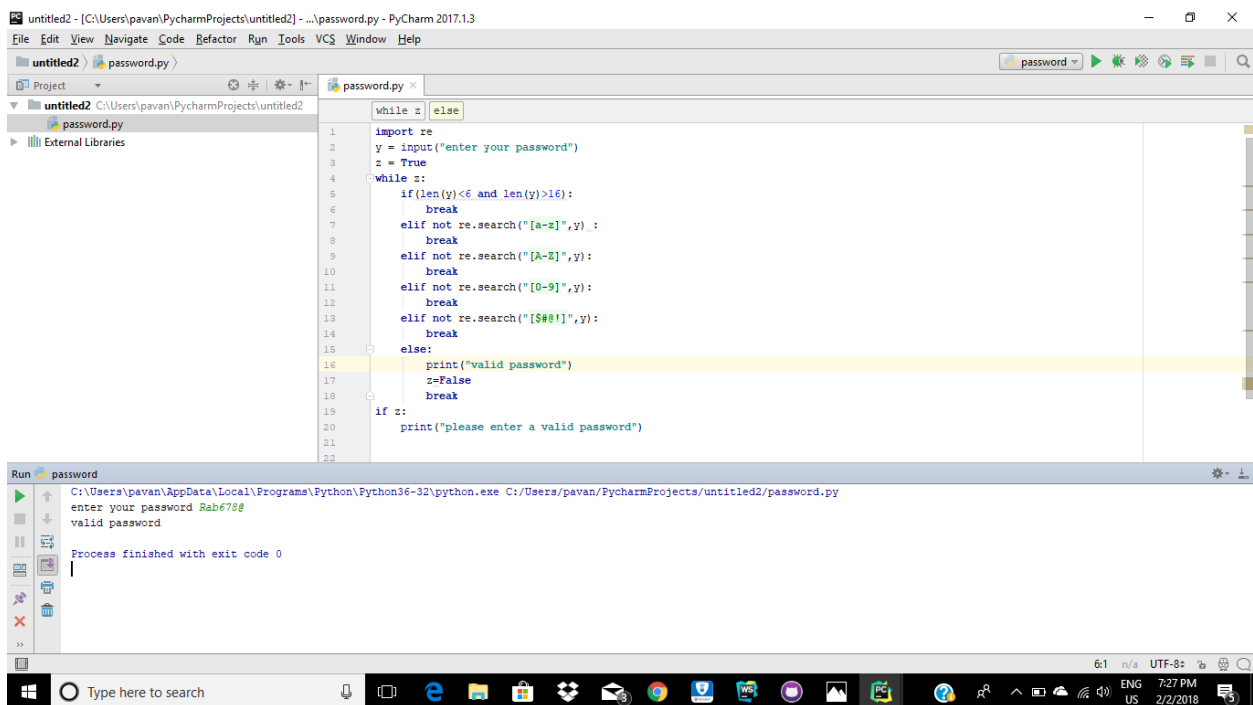
Features: Main features of the assignment are to get hands on in implementing:

- 1) Lists
- 2) Tuples
- 3) Loops
- 4) Functions

Configuration: The programs are implemented in pycharm with version 3.6

## Programs

### 1)CODE and OUTPUT:



The screenshot displays the PyCharm IDE interface. The main editor window shows a Python script named `password.py` with the following code:

```
1 while z:
2     import re
3     y = input("enter your password")
4     z = True
5     while z:
6         if (len(y)<6 and len(y)>16):
7             break
8         elif not re.search("[a-z]",y):
9             break
10        elif not re.search("[A-Z]",y):
11            break
12        elif not re.search("[0-9]",y):
13            break
14        elif not re.search("[$#@]",y):
15            break
16        else:
17            print("valid password")
18            z=False
19            break
20    if z:
21        print("please enter a valid password")
22
```

The Run window at the bottom shows the execution output:

```
Run password
C:\Users\pavan\AppData\Local\Programs\Python\Python36-32\python.exe C:/Users/pavan/PycharmProjects/untitled2/password.py
enter your password Rab678@
valid password
Process finished with exit code 0
```

The Windows taskbar at the bottom indicates the system time is 7:27 PM on 2/2/2018.

2)

untitled2 - [C:\Users\pavan\PycharmProjects\untitled2] - \words.py - PyCharm 2017.1.3

File Edit View Navigate Code Refactor Run Tools VCS Window Help

untitled2 > words.py

Project untitled2 C:\Users\pavan\PycharmProjects\untitled2

password.py words.py

```
1 if (y%2==0):
2     x = input("enter your sentence")
3     word_list = x.split()
4     y=len(word_list)
5     if(y%2==0):
6         first = int(y/2)
7         sec = int(y/2)-1
8         print("the length of the sentence is",len(word_list))
9         print("the middle words are",word_list[sec],"and",word_list[first])
10    else:
11        z=int((y/2))
12        print("the length of the sentence is",len(word_list))
13        print("the middle word is",word_list[z])
```

Run: password words

C:\Users\pavan\AppData\Local\Programs\Python\Python36-32\python.exe C:\Users\pavan\PycharmProjects\untitled2\words.py

enter your sentence a b c d

the length of the sentence is 4

the middle words are b and c

Process finished with exit code 0

PEP 8: missing whitespace after ';

7:1 m/a UTF-8: ENG 8:49 PM 2/2/2018

untitled2 - [C:\Users\pavan\PycharmProjects\untitled2] - \Longest.py - PyCharm 2017.1.3

File Edit View Navigate Code Refactor Run Tools VCS Window Help

untitled2 > Longest.py

password.py words.py Longest.py

```
1 x = input("enter your sentence")
2 word_list = x.split()
3 long_word = ''
4 for word in word_list:
5     if len(word) > len(long_word):
6         long_word = word
7 print(long_word)
```

Run: password Longest

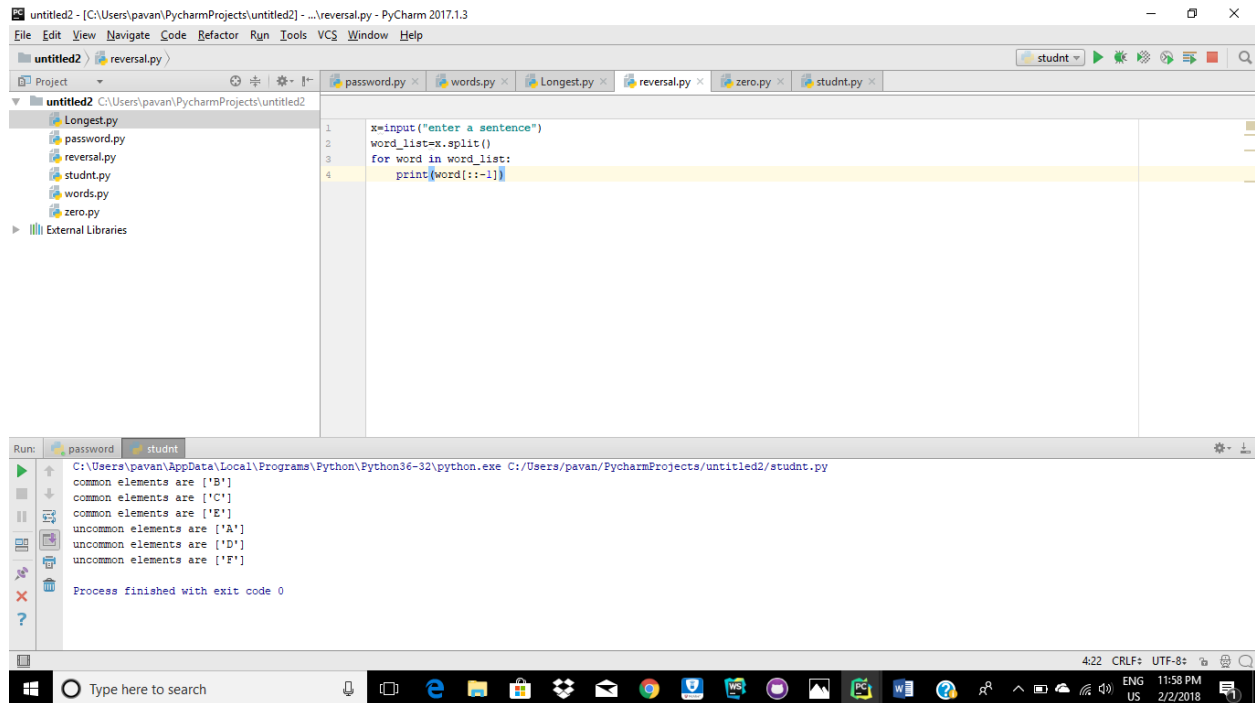
C:\Users\pavan\AppData\Local\Programs\Python\Python36-32\python.exe C:\Users\pavan\PycharmProjects\untitled2\Longest.py

enter your sentence hello python world

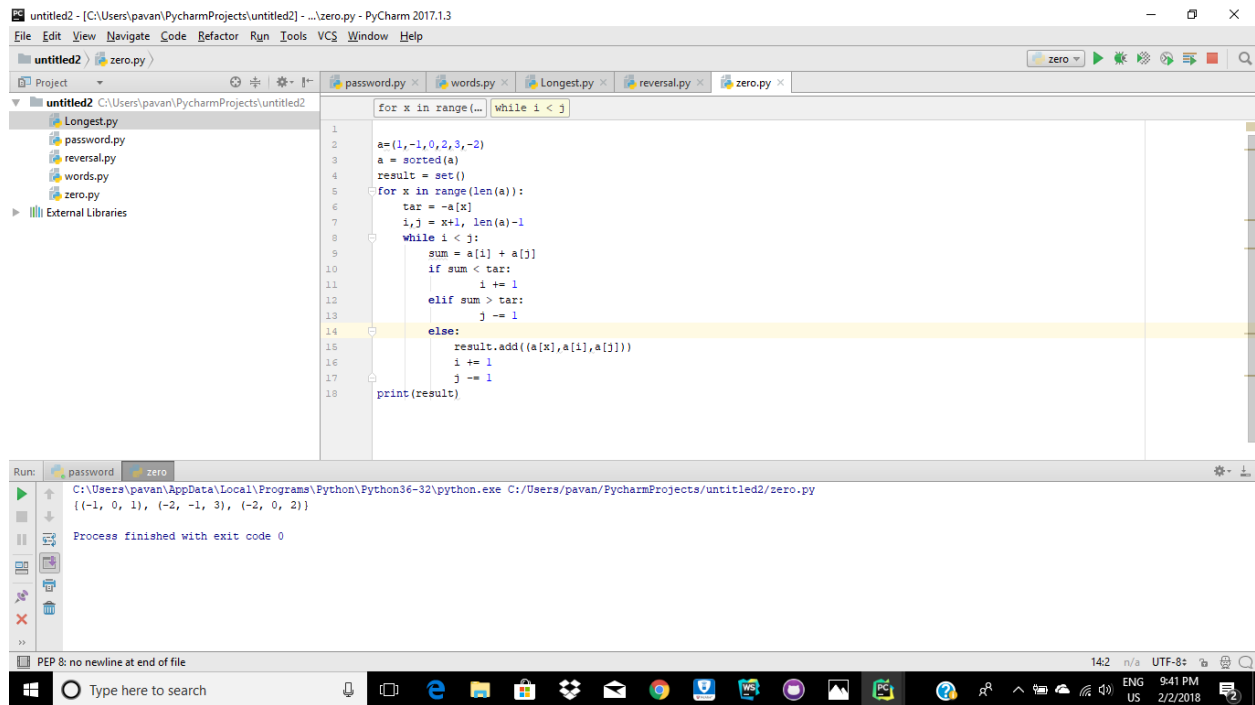
python

Process finished with exit code 0

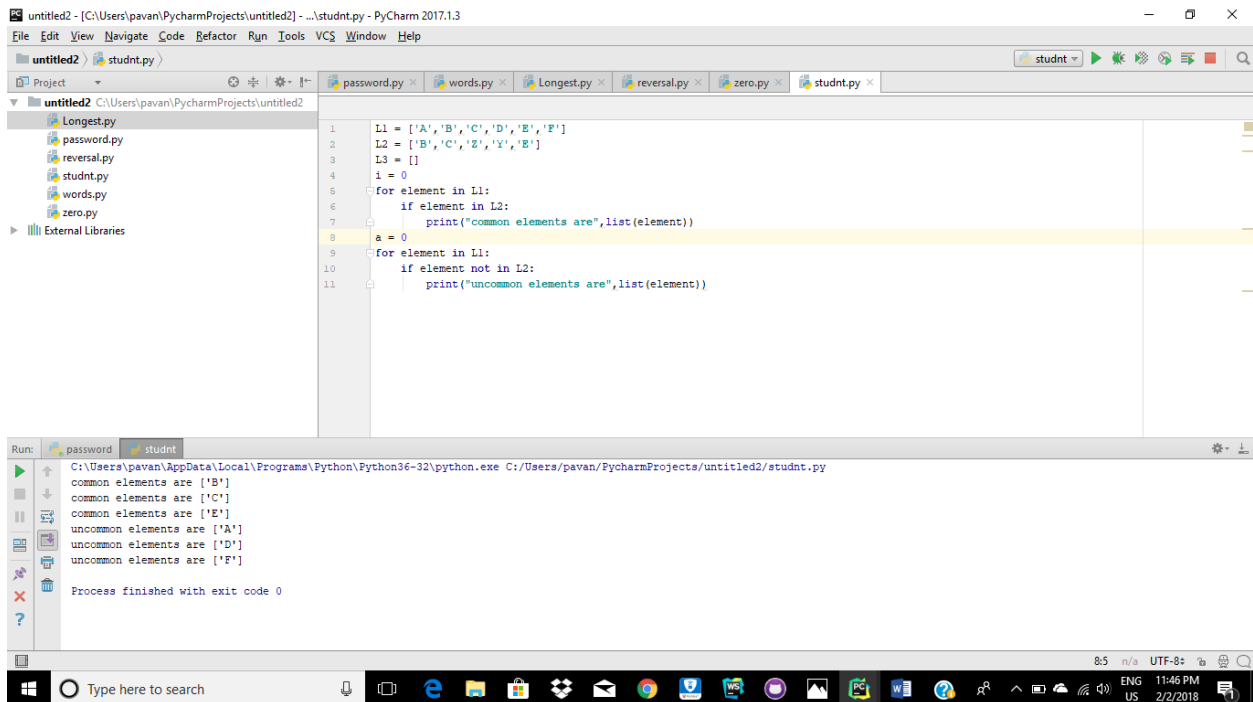
6:1 m/a UTF-8: ENG 8:55 PM 2/2/2018



3)



4)



```
untitled2 - [C:\Users\pavan\PycharmProjects\untitled2] - ...studnt.py - PyCharm 2017.1.3
File Edit View Navigate Code Refactor Run Tools VCS Window Help

Project: untitled2 C:\Users\pavan\PycharmProjects\untitled2
password.py words.py Longest.py reversal.py zero.py studnt.py
Longest.py
password.py
reversal.py
studnt.py
words.py
zero.py
External Libraries

1 L1 = ['A','B','C','D','E','F']
2 L2 = ['B','C','Z','Y','E']
3 L3 = []
4 i = 0
5 for element in L1:
6     if element in L2:
7         print("common elements are",list(element))
8     a = 0
9     for element in L1:
10        if element not in L2:
11            print("uncommon elements are",list(element))

Run: password studnt
C:\Users\pavan\AppData\Local\Programs\Python\Python36-32\python.exe C:\Users\pavan\PycharmProjects\untitled2\studnt.py
common elements are ['B']
common elements are ['C']
common elements are ['E']
uncommon elements are ['A']
uncommon elements are ['D']
uncommon elements are ['F']
Process finished with exit code 0

8:5 n/a UTF-8: 11:46 PM 2/2/2018
```

## Deployment:

The code is run on pycharm platform.

## References:

<https://stackoverflow.com/questions/16312730/comparing-two-lists-and-only-printing-the-differences-xoring-two-lists>

<https://stackoverflow.com/questions>

<https://geeksforgeeks.com>

<https://w3schools.com>

