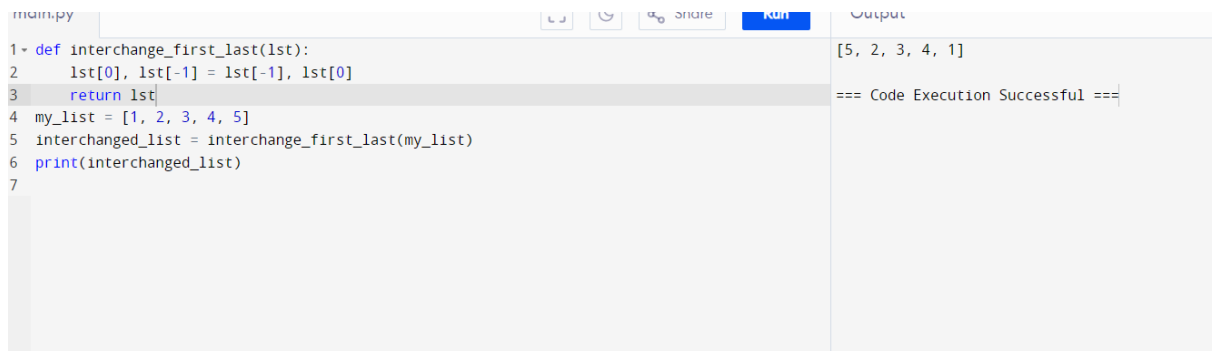


SAVEETHA SCHOOL OF ENGINEERING
DEPARTMENT OF COMPUTERSCIENCE AND ENGINEERING
CSA0889 – Python Programming
ASSIGNMENT 01

- 1) Write a python program to interchange first and last elements in a list.



The screenshot shows a Python IDE with a file named 'main.py'. The code defines a function 'interchange_first_last' that takes a list 'lst' and swaps the first and last elements. It then creates a list 'my_list' with values [1, 2, 3, 4, 5], calls the function, and prints the resulting list. The output on the right shows '[5, 2, 3, 4, 1]' and a success message.

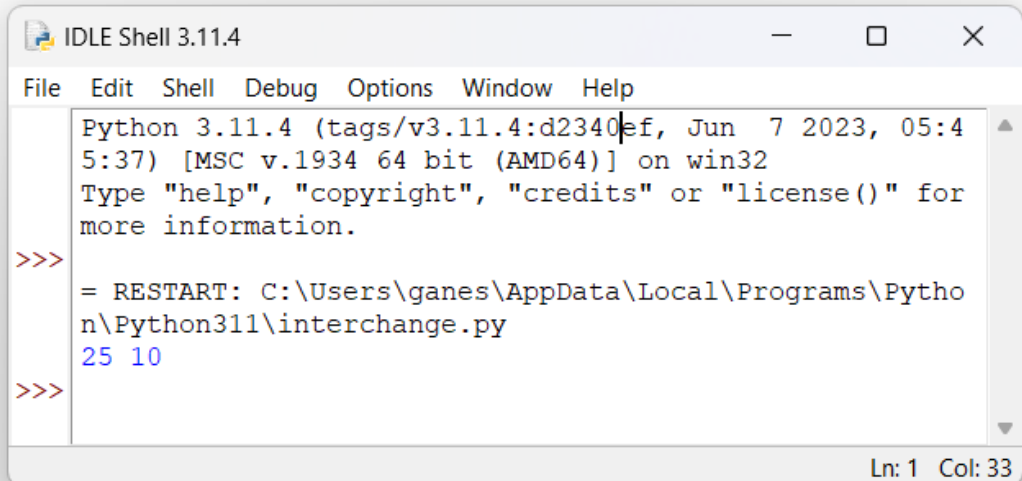
```
main.py
1 def interchange_first_last(lst):
2     lst[0], lst[-1] = lst[-1], lst[0]
3     return lst
4 my_list = [1, 2, 3, 4, 5]
5 interchanged_list = interchange_first_last(my_list)
6 print(interchanged_list)
7
```

Output: [5, 2, 3, 4, 1]
=== Code Execution Successful ===

- 2) Write a python program to swap two elements in a list.

File Edit Format Run Options Window Help

```
def swap(a, b):  
    c = a  
    a = b  
    b = c  
    return a, b  
my_list = [10, 25]  
a, b = my_list  
a, b = swap(a, b)  
print(a, b)
```



The screenshot shows the IDLE Shell 3.11.4 window. The title bar is "IDLE Shell 3.11.4". The menu bar includes "File", "Edit", "Shell", "Debug", "Options", "Window", and "Help". The shell displays the following text:

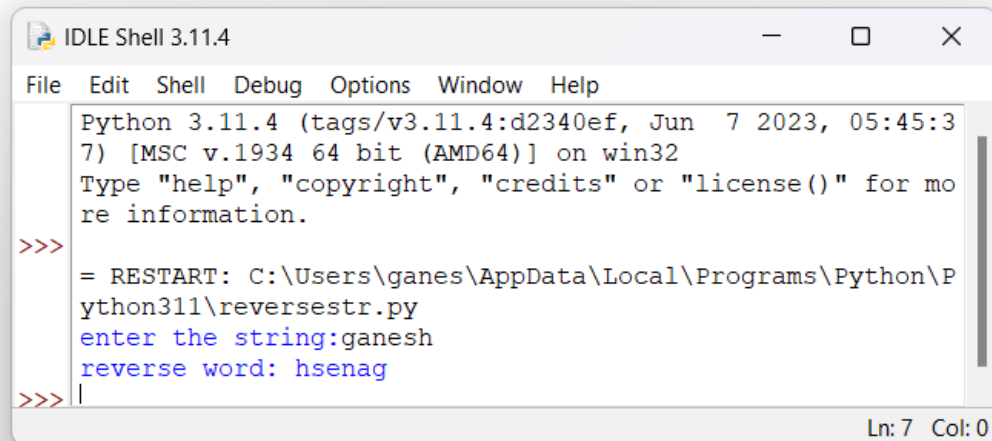
```
Python 3.11.4 (tags/v3.11.4:d2340ef, Jun 7 2023, 05:45:37) [MSC v.1934 64 bit (AMD64)] on win32  
Type "help", "copyright", "credits" or "license()" for more information.  
>>>  
= RESTART: C:\Users\ganes\AppData\Local\Programs\Python\Python311\interchange.py  
25 10  
>>>
```

The status bar at the bottom right indicates "Ln: 1 Col: 33".

3) Write a python program to reverse a word in a given string.

File Edit Format Run Options Window Help

```
n=str(input("enter the string:"))
n==n[::-1]
print("reverse word:",n[::-1])
```



The screenshot shows the IDLE Shell 3.11.4 window. The menu bar includes File, Edit, Shell, Debug, Options, Window, and Help. The shell displays the following text:

```
Python 3.11.4 (tags/v3.11.4:d2340ef, Jun 7 2023, 05:45:37) [MSC v.1934 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.

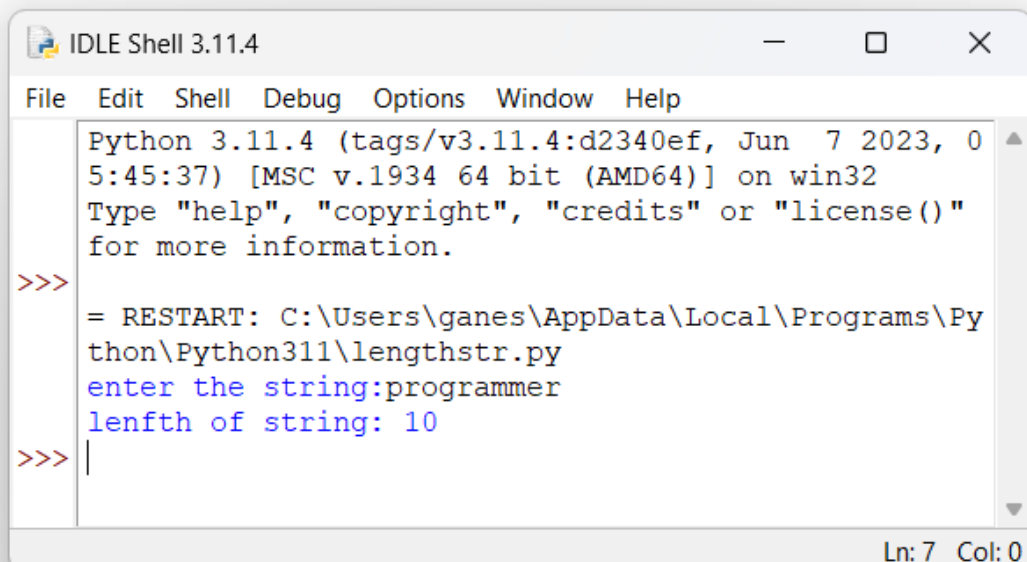
>>>
= RESTART: C:\Users\ganes\AppData\Local\Programs\Python\Python311\reversestr.py
enter the string:ganesh
reverse word: hsenag
>>> |
```

The status bar at the bottom right indicates "Ln: 7 Col: 0".

4) Find the length of a string in a python.

File Edit Format Run Options Window Help

```
n=str(input("enter the string:"))
length_str=len(n)
print("lenfth of string:",length_str)
```



The screenshot shows the IDLE Shell 3.11.4 window. The menu bar includes File, Edit, Shell, Debug, Options, Window, and Help. The shell displays the following text:

```
Python 3.11.4 (tags/v3.11.4:d2340ef, Jun 7 2023, 05:45:37) [MSC v.1934 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.

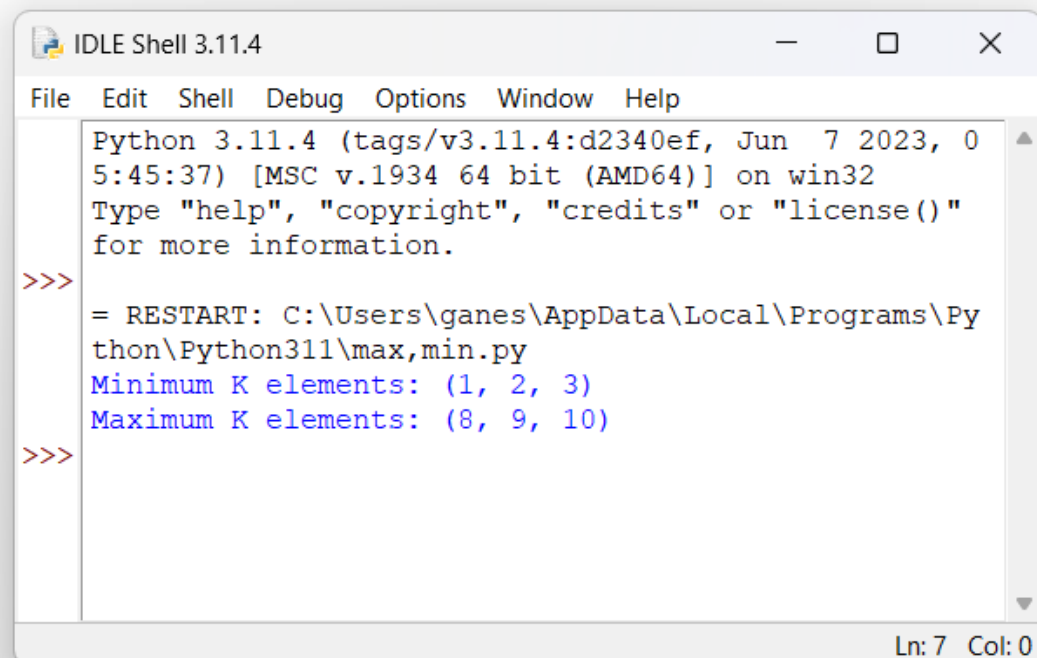
>>>
= RESTART: C:\Users\ganes\AppData\Local\Programs\Python\Python311\lengthstr.py
enter the string:programmer
lenfth of string: 10
>>> |
```

The status bar at the bottom right indicates "Ln: 7 Col: 0".

5) Python program to find maximum and minimum in k elements in a tuple.

```
File Edit Format Run Options Window Help
def max_min_k_elements(tup, k):
    sorted_tup = tuple(sorted(tup))
    min_k_elements = sorted_tup[:k]
    max_k_elements = sorted_tup[-k:]
    return min_k_elements, max_k_elements
tup = (10, 4, 5, 8, 2, 7, 3, 9, 1, 6)
k = 3
min_k, max_k = max_min_k_elements(tup, k)

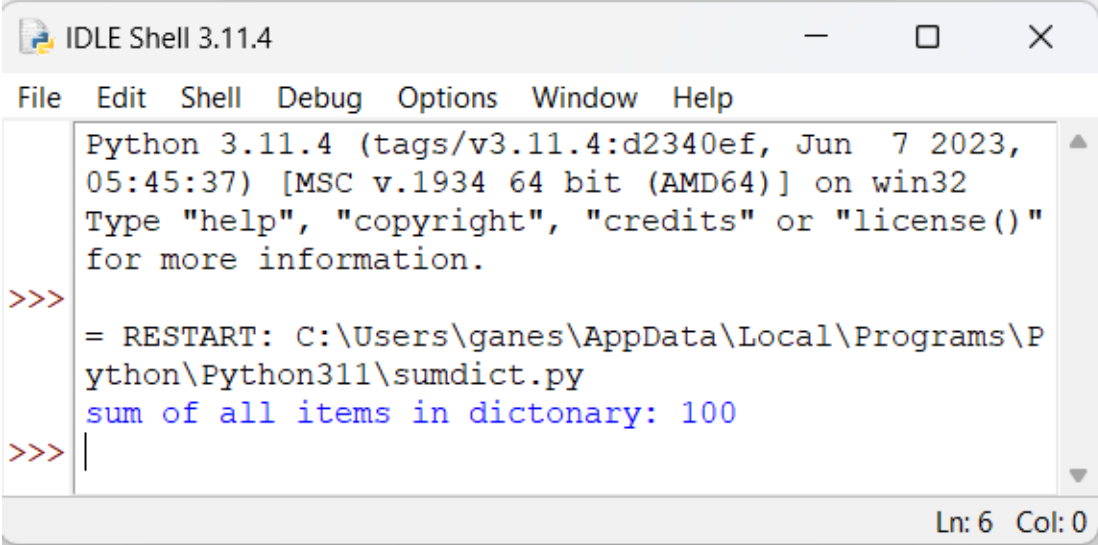
print("Minimum K elements:", min_k)
print("Maximum K elements:", max_k)
```



```
IDLE Shell 3.11.4
File Edit Shell Debug Options Window Help
Python 3.11.4 (tags/v3.11.4:d2340ef, Jun 7 2023, 0
5:45:37) [MSC v.1934 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()"
for more information.
>>>
= RESTART: C:\Users\ganes\AppData\Local\Programs\Py
thon\Python311\max,min.py
Minimum K elements: (1, 2, 3)
Maximum K elements: (8, 9, 10)
>>>
Ln: 7 Col: 0
```

6) Write a python program to find sum of all elements in a dictionary.

```
File Edit Format Run Options Window Help
my_dict={'a':10,'b':20,'c':30,'d':40}
totalsum=sum(my_dict.values())
print("sum of all items in dictionary:",totalsum)
```



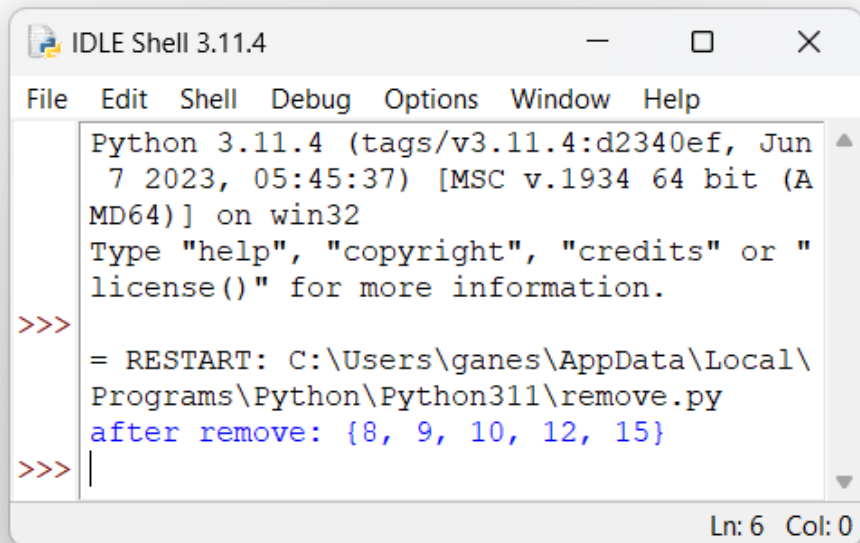
```
Python 3.11.4 (tags/v3.11.4:d2340ef, Jun 7 2023, 05:45:37) [MSC v.1934 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()"
>>>
= RESTART: C:\Users\ganes\AppData\Local\Programs\Python\Python311\sumdict.py
sum of all items in dictionary: 100
>>> |
```

Ln: 6 Col: 0

7) Write a python program to remove items from set.

File Edit Format Run Options Window Help

```
my_set=set([12, 10, 13, 15, 8, 9])  
my_set.remove(13)  
print("after remove:",my_set)
```



Python 3.11.4 (tags/v3.11.4:d2340ef, Jun 7 2023, 05:45:37) [MSC v.1934 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.

```
>>> = RESTART: C:\Users\ganes\AppData\Local\Programs\Python\Python311\remove.py  
after remove: {8, 9, 10, 12, 15}  
>>> |
```

Ln: 6 Col: 0