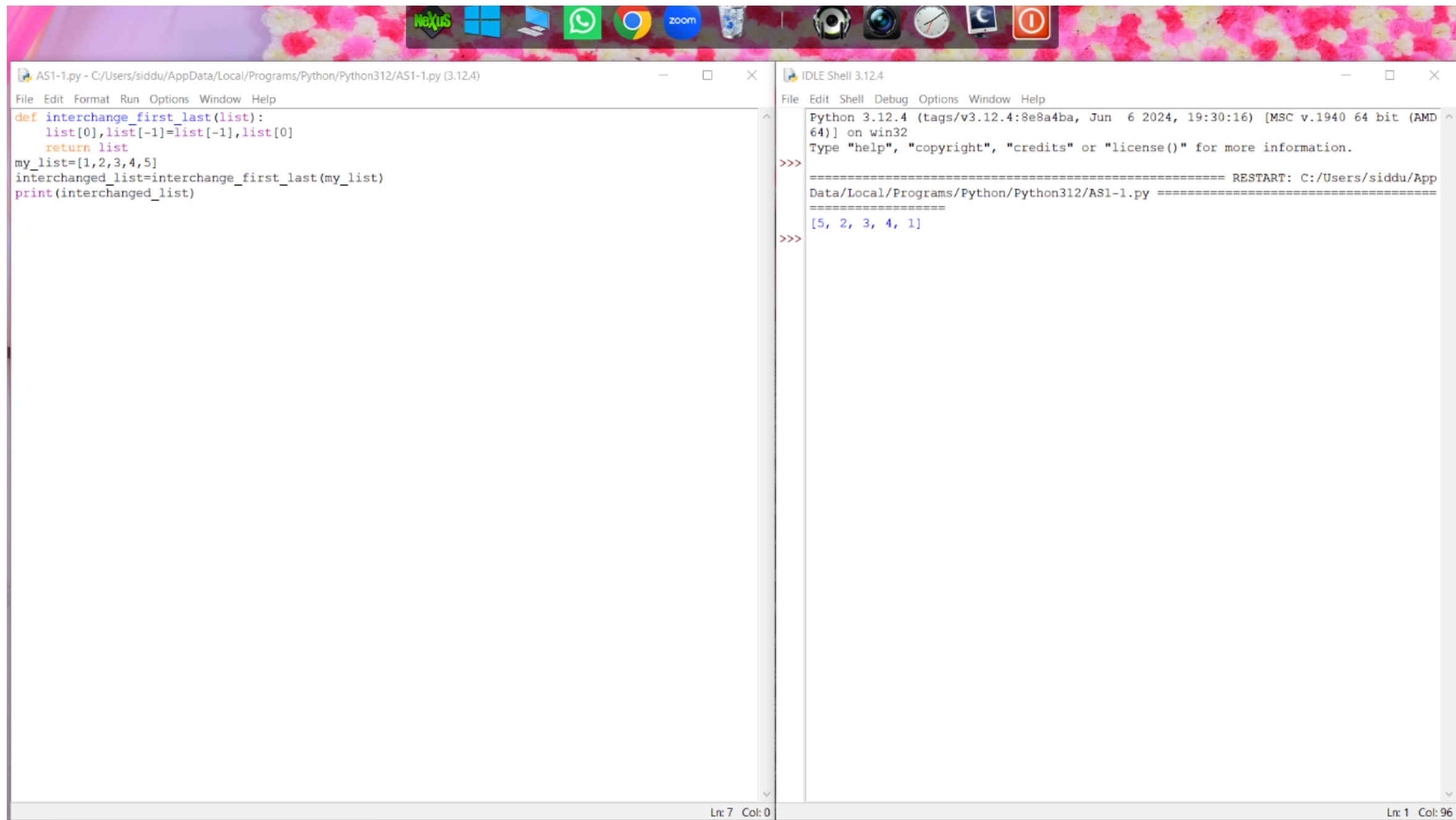


1. Write a Python program to interchange first and last elements in a list.



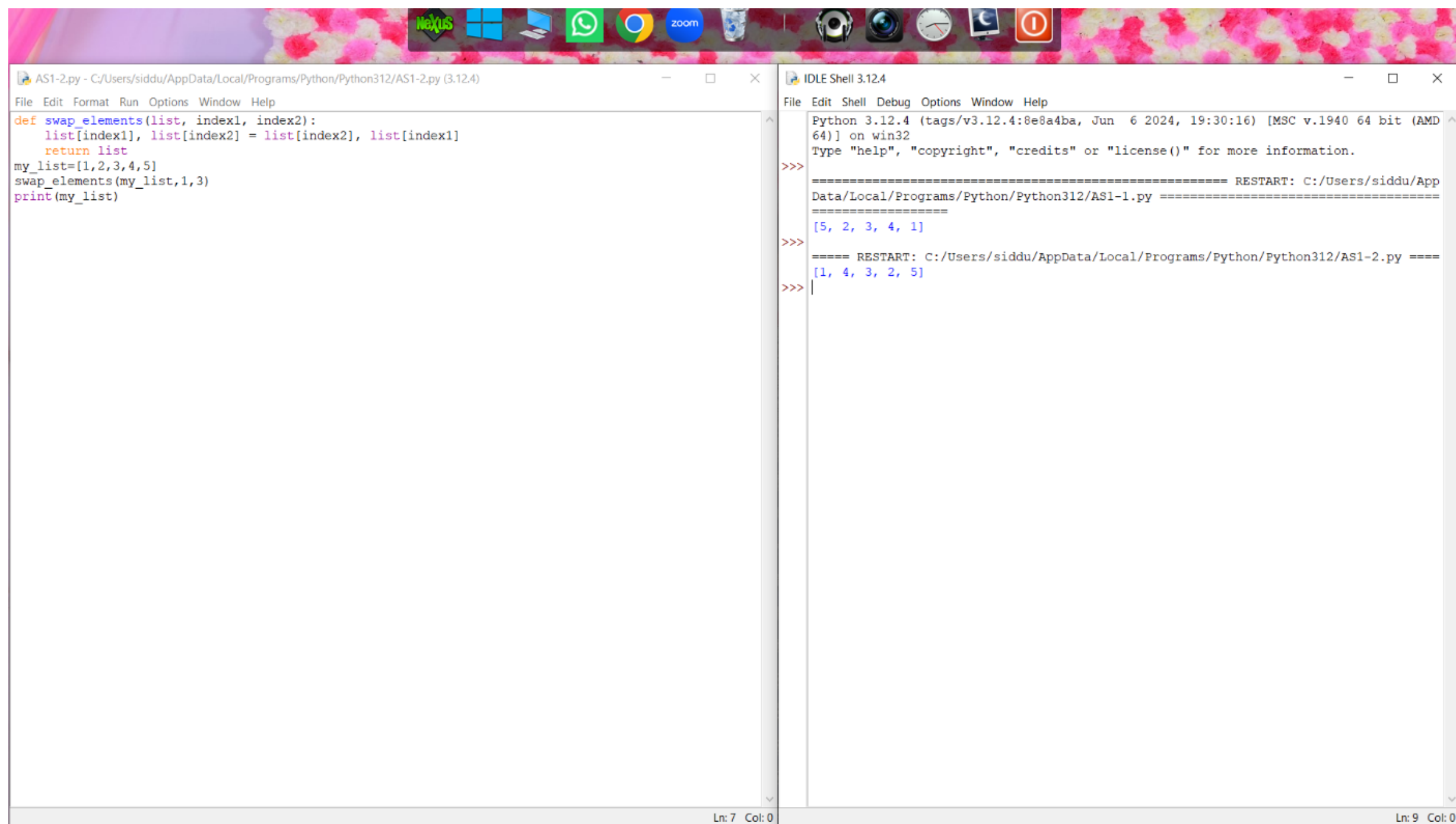
The screenshot shows a Python IDE with two windows. The left window, titled 'AS1-1.py', contains the following code:

```
def interchange_first_last(list):  
    list[0],list[-1]=list[-1],list[0]  
    return list  
my_list=[1,2,3,4,5]  
interchanged_list=interchange_first_last(my_list)  
print(interchanged_list)
```

The right window, titled 'IDLE Shell 3.12.4', shows the output of the program:

```
Python 3.12.4 (tags/v3.12.4:8e8a4ba, Jun 6 2024, 19:30:16) [MSC v.1940 64 bit (AMD  
64)] on win32  
Type "help", "copyright", "credits" or "license()" for more information.  
>>>  
===== RESTART: C:/Users/siddu/App  
Data/Local/Programs/Python/Python312/AS1-1.py =====  
[5, 2, 3, 4, 1]  
>>>
```

2. Write a Python program to swap 2 elements in a list.



The screenshot shows a Python IDE with two windows. The left window, titled 'AS1-2.py', contains the following code:

```
def swap_elements(list, index1, index2):  
    list[index1], list[index2] = list[index2], list[index1]  
    return list  
my_list=[1,2,3,4,5]  
swap_elements(my_list,1,3)  
print(my_list)
```

The right window, titled 'IDLE Shell 3.12.4', shows the output of the program:

```
Python 3.12.4 (tags/v3.12.4:8e8a4ba, Jun 6 2024, 19:30:16) [MSC v.1940 64 bit (AMD  
64)] on win32  
Type "help", "copyright", "credits" or "license()" for more information.  
>>>  
===== RESTART: C:/Users/siddu/App  
Data/Local/Programs/Python/Python312/AS1-1.py =====  
[5, 2, 3, 4, 1]  
>>>  
===== RESTART: C:/Users/siddu/AppData/Local/Programs/Python/Python312/AS1-2.py =====  
[1, 4, 3, 2, 5]  
>>>
```

3. Write a Python program to reverse a words in a given string.

```
AS1-3.py - C:/Users/siddu/AppData/Local/Programs/Python/Python312/AS1-3.py (3.12.4)
File Edit Format Run Options Window Help
def reverse_words(string):
    words = string.split()
    reversed_words = ' '.join(reversed(words))
    return reversed_words
my_string = "Hello World"
reversed_string = reverse_words(my_string)
print(reversed_string)
Ln: 5 Col: 0

IDLE Shell 3.12.4
File Edit Shell Debug Options Window Help
Python 3.12.4 (tags/v3.12.4:8e8a4ba, Jun 6 2024, 19:30:16) [MSC v.1940 64 bit (AMD 64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:/Users/siddu/AppData/Local/Programs/Python/Python312/AS1-1.py =====
[5, 2, 3, 4, 1]
>>>
===== RESTART: C:/Users/siddu/AppData/Local/Programs/Python/Python312/AS1-2.py =====
[1, 4, 3, 2, 5]
>>>
===== RESTART: C:/Users/siddu/AppData/Local/Programs/Python/Python312/AS1-3.py =====
World Hello
>>>
```

4. Write a Python program to find length of a string.

```
AS1-4.py - C:/Users/siddu/AppData/Local/Programs/Python/Python312/AS1-4.py (3.12.4)
File Edit Format Run Options Window Help
my_string="hello, world!"
string_length=len(my_string)
print(string_length)
Ln: 4 Col: 0

IDLE Shell 3.12.4
File Edit Shell Debug Options Window Help
Python 3.12.4 (tags/v3.12.4:8e8a4ba, Jun 6 2024, 19:30:16) [MSC v.1940 64 bit (AMD 64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:/Users/siddu/AppData/Local/Programs/Python/Python312/AS1-1.py =====
[5, 2, 3, 4, 1]
>>>
===== RESTART: C:/Users/siddu/AppData/Local/Programs/Python/Python312/AS1-2.py =====
[1, 4, 3, 2, 5]
>>>
===== RESTART: C:/Users/siddu/AppData/Local/Programs/Python/Python312/AS1-3.py =====
World Hello
>>>
===== RESTART: C:/Users/siddu/AppData/Local/Programs/Python/Python312/AS1-4.py =====
13
>>>
```

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

```
AS1-5.py - C:/Users/siddu/AppData/Local/Programs/Python/Python312/AS1-5.py (3.12.4)
File Edit Format Run Options Window Help
def max_min_k_elements(tuple_data, k):
    sorted_tuple = sorted(tuple_data)
    max_elements = sorted_tuple[-k:]
    min_elements = sorted_tuple[:k]
    return max_elements, min_elements
my_tuple = (4, 7, 1, 9, 3, 2, 5)
k = 3
max_elements, min_elements = max_min_k_elements(my_tuple, k)
print("Maximum elements:", max_elements)
print("Minimum elements:", min_elements)
Ln: 5 Col: 37

IDLE Shell 3.12.4
File Edit Shell Debug Options Window Help
Python 3.12.4 (tags/v3.12.4:8e8a4ba, Jun 6 2024, 19:30:16) [MSC v.1940 64 bit (AMD 64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:/Users/siddu/AppData/Local/Programs/Python/Python312/AS1-1.py =====
>>> [5, 2, 3, 4, 1]
===== RESTART: C:/Users/siddu/AppData/Local/Programs/Python/Python312/AS1-2.py =====
>>> [1, 4, 3, 2, 5]
===== RESTART: C:/Users/siddu/AppData/Local/Programs/Python/Python312/AS1-3.py =====
>>> World Hello
===== RESTART: C:/Users/siddu/AppData/Local/Programs/Python/Python312/AS1-4.py =====
>>> 13
===== RESTART: C:/Users/siddu/AppData/Local/Programs/Python/Python312/AS1-5.py =====
>>> Maximum elements: [5, 7, 9]
>>> Minimum elements: [1, 2, 3]
>>>
```

6. Write a Python program to find sum of all items in a dictionary.

```
AS1-6.py - C:/Users/siddu/AppData/Local/Programs/Python/Python312/AS1-6.py (3.12.4)
File Edit Format Run Options Window Help
def sum_dictionary_items(dictionary):
    return sum(dictionary.values())
my_dict = {'a': 10, 'b': 20, 'c': 30}
total_sum = sum_dictionary_items(my_dict)
print(total_sum)
Ln: 6 Col: 0

IDLE Shell 3.12.4
File Edit Shell Debug Options Window Help
Python 3.12.4 (tags/v3.12.4:8e8a4ba, Jun 6 2024, 19:30:16) [MSC v.1940 64 bit (AMD 64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:/Users/siddu/AppData/Local/Programs/Python/Python312/AS1-1.py =====
>>> [5, 2, 3, 4, 1]
===== RESTART: C:/Users/siddu/AppData/Local/Programs/Python/Python312/AS1-2.py =====
>>> [1, 4, 3, 2, 5]
===== RESTART: C:/Users/siddu/AppData/Local/Programs/Python/Python312/AS1-3.py =====
>>> World Hello
===== RESTART: C:/Users/siddu/AppData/Local/Programs/Python/Python312/AS1-4.py =====
>>> 13
===== RESTART: C:/Users/siddu/AppData/Local/Programs/Python/Python312/AS1-5.py =====
>>> Maximum elements: [5, 7, 9]
>>> Minimum elements: [1, 2, 3]
===== RESTART: C:/Users/siddu/AppData/Local/Programs/Python/Python312/AS1-6.py =====
>>> 60
>>>
```

7. Write a Python program to remove items from set.

