1. Write a program to print the number of negative numbers in the list of numbers

Program:

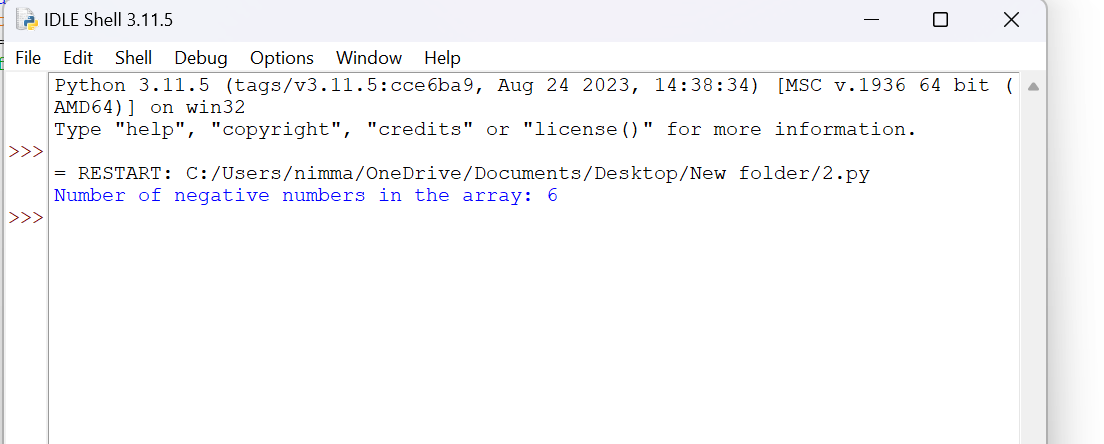
def count\_negative\_numbers(arr):

return sum(1 for num in arr if num < 0)

array = [1, -2, 3, -4, 5, -6, 7, -8, 9, -10, 11, 12, -13, 14, 15]

print(f"Number of negative numbers in the array: {count\_negative\_numbers(array)}")

Output:



1. Write a program to merge two sorted lists to the third list

Program:

def merge\_sorted\_lists(list1, list2):

merged\_list = []

i, j = 0, 0

while i < len(list1) and j < len(list2):

if list1[i] < list2[j]:

merged\_list.append(list1[i])

i += 1

else:

merged\_list.append(list2[j])

j += 1

while i < len(list1):

merged\_list.append(list1[i])

i += 1

while j < len(list2):

merged\_list.append(list2[j])

j += 1

return merged\_list

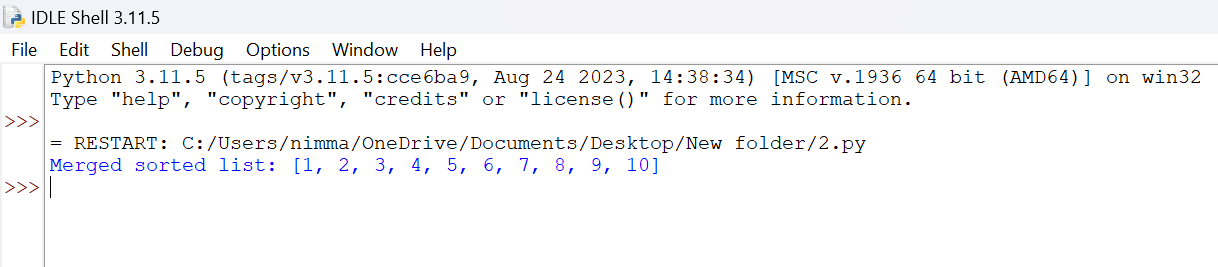
sorted\_list1 = [1, 3, 5, 7, 9]

sorted\_list2 = [2, 4, 6, 8, 10]

merged\_list = merge\_sorted\_lists(sorted\_list1, sorted\_list2)

print(f"Merged sorted list: {merged\_list}")

Output:



1. Write a program to insert an element in a specific index

Program:

def insert\_element(lst, index, element):

if index < 0 or index > len(lst):

raise IndexError("Index out of range")

lst.insert(index, element)

return lst

my\_list = [1, 2, 4, 5]

index\_to\_insert = 2

element\_to\_insert = 3

updated\_list = insert\_element(my\_list, index\_to\_insert, element\_to\_insert)

print(f"Updated list: {updated\_list}")

Output:

