Problem Statement:

Find the Second Largest Element in an Array Write a program to find the second-largest element in an array of integers without using any sorting algorithms or built-in array functions.

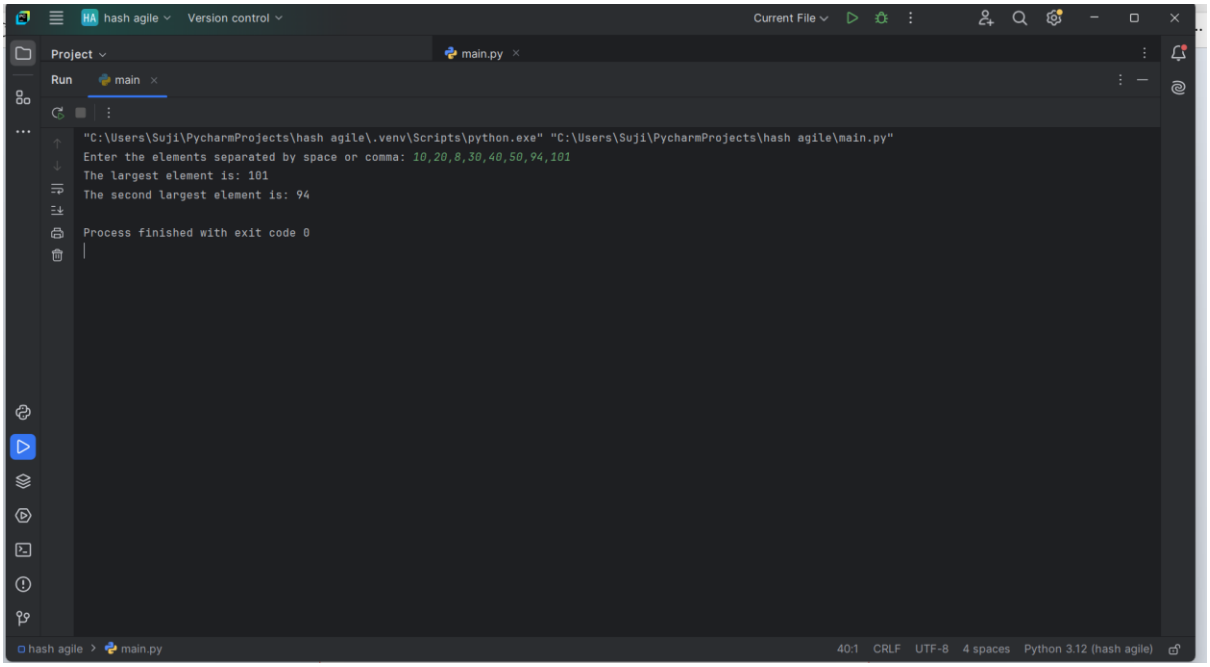
Instructions: Traverse the array manually to find both the largest and second-largest element

Program Code:

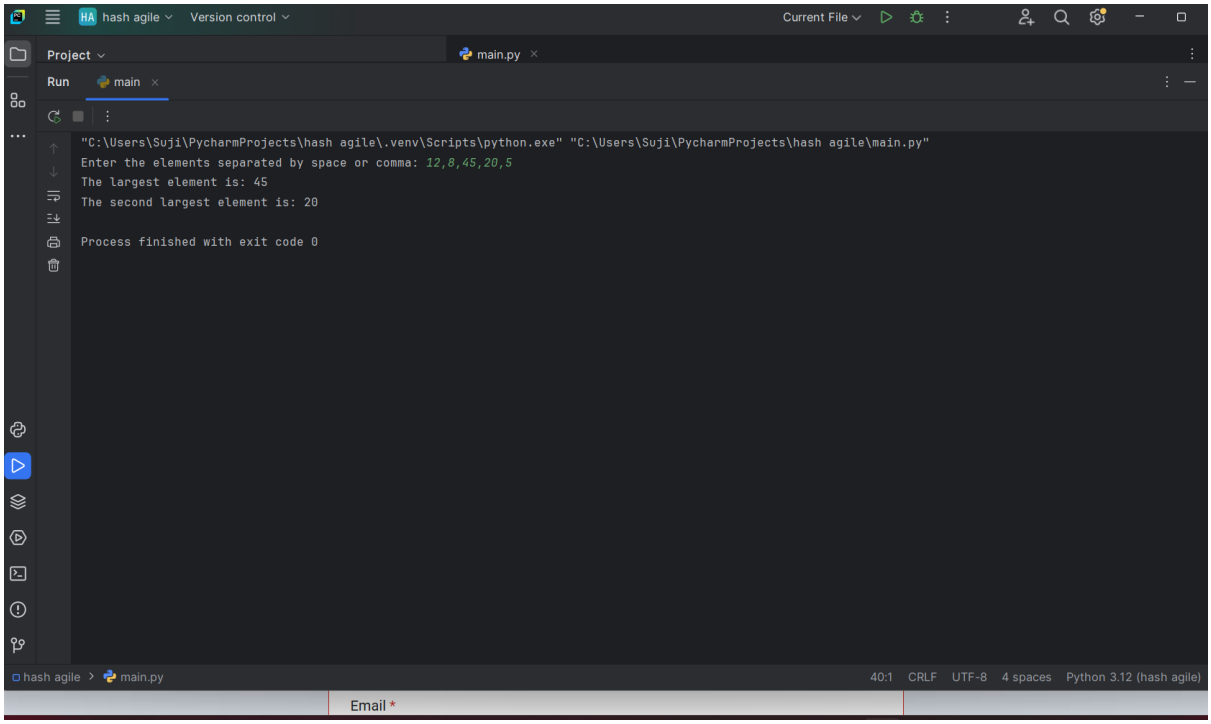
```
def get_largest(array, n):
    largest = 0
    for i in range(1, n):
        if array[i] > array[largest]:
            largest = i
    return largest


def get_second_largest(array, n):
    largest = get_largest(array, n)
    result = -1
    for i in range(n):
        if array[i] != array[largest]:
            if result == -1 or array[i] > array[result]:
                result = i
    return result


def main():
    elements = input("Enter the elements separated by space or comma: ")



    array = [int(x) for x in elements.replace(",", " ").split()]


    n = len(array)


    if n < 2:
```

```
        print("At least two elements are required to find the second largest.")
        return
    largest_ind = get_largest(array, n)
    second_largest_ind = get_second_largest(array, n)
    print(f"The largest element is: {array[largest_ind]}")

    if second_largest_ind!= -1:
        print(f"The second largest element is: {array[second_largest_ind]}")
    else:
        print("There is no second largest element.")
main()
```

Sample input 1:



Sample input 2:



Sample input 3: