Started on	Thursday, 17 April 2025, 11:11 AM			
State	Finished			
Completed on	Thursday, 17 April 2025, 11:29 AM			
Time taken	18 mins 27 secs			
Grade	<b>80.00</b> out of 100.00			

```
Question 1
Correct
Mark 20.00 out of 20.00
```

Write a python program for a search function with parameter list name and the value to be searched on the given list of int values.

### For example:

Test	Input	Result
search(List, n)	5	Found
	3	
	4	
	5	
	6	
	7	
	4	
search(List, n)	6	Found
	20	
	34	
	56	
	87	
	96	
	51	
	87	

**Answer:** (penalty regime: 0 %)

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```
global key
def search(List,n):
    for i in range(n):
       if(List[i] == key):
            return i
    else:
        return -1
List=[]
n=int(input())
for i in range(n):
    List.append(int(input()))
key=int(input())
res=search(List,n)
if (res!=-1):
    print("Found")
else:
    print("Not Found")
```

	Test	Input	Expected	Got	
~	search(List, n)	5	Found	Found	~
		4			
		5			
		6			
		7			
		4			
~	search(List, n)	6	Found	Found	~
		20			
		34			
		56			
		87			
		96			
		51			
		87			
~	search(List, n)	4	Not Found	Not Found	~
		30			
		10			
		20			
		50			
		60			

Passed all tests! ✓

Correct

```
Question 2
Correct
Mark 20.00 out of 20.00
```

Write a python program for a search function with parameter list name and the value to be searched on the given list of float values.

## For example:

Test	Input	Result
search(List, n)	5	3.2 Found
	3.2	
	6.1	
	4.5	
	6.2	
	8.5	
	3.2	
search(List, n)	4	6.1 Not Found
	3.2	
	1.5	
	6.4	
	7.8	
	6.1	

**Answer:** (penalty regime: 0 %)

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```
global key
def search(List,n):
    for i in range(n):
       if(List[i] == key):
           return i
    else:
       return -1
List=[]
n=int(int(input()))
for i in range(n):
   List.append(float(input()))
key=float(input())
res=search(List,n)
if (res!=-1):
   print(f"{key} Found")
    print(f"{key} Not Found")
```

	Test	Input	Expected	Got	
~	search(List, n)	5 3.2 6.1 4.5 6.2 8.5 3.2	3.2 Found	3.2 Found	~

	Test	Input	Expected	Got	
~	search(List, n)	4	6.1 Not Found	6.1 Not Found	~
		3.2			
		1.5			
		6.4			
		7.8			
		6.1			
~	search(List, n)	7	9.3 Not Found	9.3 Not Found	~
		2.1			
		3.2			
		6.5			
		4.1			
		5.2			
		7.1			
		8.2			
		9.3			

Passed all tests! 🗸

Correct

```
Question 3

Not answered

Mark 0.00 out of 20.00
```

Write a python program to implement quick sort on the given float array values.

# For example:

Input	Result
5 6.9 8.3 2.1 1.5 6.4	<pre>left: [] right: [] left: [] right: [] left: [1.5] right: [6.4] left: [] right: [] left: [1.5, 2.1, 6.4]</pre>
	right: [8.3] [1.5, 2.1, 6.4, 6.9, 8.3]
6 3.1 2.4 5.6 4.3 6.2 7.8	<pre>left: [] right: [] left: [] right: [] left: [] right: [] left: [] right: [7.8] left: [4.3] right: [6.2, 7.8] left: [2.4] right: [4.3, 5.6, 6.2, 7.8] [2.4, 3.1, 4.3, 5.6, 6.2, 7.8]</pre>

**Answer:** (penalty regime: 0 %)

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```
Question 4
Correct
Mark 20.00 out of 20.00
```

Write a python program to implement merge sort using iterative approach on the given list of float values.

## For example:

Test	Input	Result
Merge_Sort(S)	5 10.2 21.3 3.5 7.8	The Original array is: [10.2, 21.3, 3.5, 7.8, 9.8] Array after sorting is: [3.5, 7.8, 9.8, 10.2, 21.3]
Merge_Sort(S)	9.8 6 20.3 41.2	The Original array is: [20.3, 41.2, 5.3, 6.2, 8.1, 65.2] Array after sorting is: [5.3, 6.2, 8.1, 20.3, 41.2, 65.2]
	5.3 6.2 8.1 65.2	

**Answer:** (penalty regime: 0 %)

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```
def Merge_Sort(S):
    size=len(S)
    if(size>1):
        mid=size//2
        l=S[:mid]
        r=S[mid:]
        Merge Sort(1)
        Merge_Sort(r)
        ls=len(l)
        rs=len(r)
        i=j=k=0
        while(i<ls and j<rs):</pre>
             if(l[i]<r[j]):</pre>
                 S[k]=1[i]
                 i+=1
             else:
                 S[k]=r[j]
                 j+=1
```

	Test	Input	Expected	Got	
~	Merge_Sort(S)	5 10.2 21.3 3.5 7.8 9.8	The Original array is: [10.2, 21.3, 3.5, 7.8, 9.8] Array after sorting is: [3.5, 7.8, 9.8, 10.2, 21.3]	The Original array is: [10.2, 21.3, 3.5, 7.8, 9.8] Array after sorting is: [3.5, 7.8, 9.8, 10.2, 21.3]	~

	Test	Input	Expected	Got	
~	Merge_Sort(S)	6 20.3 41.2 5.3 6.2 8.1 65.2	The Original array is: [20.3, 41.2, 5.3, 6.2, 8.1, 65.2] Array after sorting is: [5.3, 6.2, 8.1, 20.3, 41.2, 65.2]	The Original array is: [20.3, 41.2, 5.3, 6.2, 8.1, 65.2] Array after sorting is: [5.3, 6.2, 8.1, 20.3, 41.2, 65.2]	~
*	Merge_Sort(S)	4 2.3 6.1 4.5 96.5	The Original array is: [2.3, 6.1, 4.5, 96.5] Array after sorting is: [2.3, 4.5, 6.1, 96.5]	The Original array is: [2.3, 6.1, 4.5, 96.5] Array after sorting is: [2.3, 4.5, 6.1, 96.5]	~

Passed all tests! 🗸

Correct

```
Question 5
Correct
Mark 20.00 out of 20.00
```

Write a Python Program to print factorial of a number recursively.

## For example:

Input	Result
5	Factorial of number 5 = 120
6	Factorial of number 6 = 720

**Answer:** (penalty regime: 0 %)

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Falling back to raw text area.

```
def fact(n):
    if(n==0):
        return 1
    else:
        return n*fact(n-1)
n=int(input())
print(f"Factorial of number {n} = {fact(n)}")
```

	Input	Expected	Got	
~	5	Factorial of number 5 = 120	Factorial of number 5 = 120	~
~	6	Factorial of number 6 = 720	Factorial of number 6 = 720	~
~	7	Factorial of number 7 = 5040	Factorial of number 7 = 5040	~
~	8	Factorial of number 8 = 40320	Factorial of number 8 = 40320	~

Passed all tests! 🗸

Correct