Started on	Thursday, 10 April 2025, 9:24 AM
State	Finished
Completed on	Thursday, 10 April 2025, 9:52 AM
Time taken	28 mins 32 secs
Grade	**80.00** out of 100.00

Question **1**

Correct

Mark 20.00 out of 20.00

Write a python program to implement binary search on the given list of string values using iterative method

For example:

Test	Input	Result
binarySearchAppr(arr, 0, len(arr)-1, x)	5 one two three four five two	Element is present at index 4
binarySearchAppr(arr, 0, len(arr)-1, x)	6 one three five seven nine eleven thirteen	Element is not present in array

Answer: (penalty regime: 0 %)

```
def binarySearchAppr(arr, low, high, x):
    arr.sort()
    while low <= high:
        mid = (low + high) // 2

        if arr[mid] == x:
            return f"Element is present at index {mid}"
        elif arr[mid] < x:
            low = mid + 1
        else:
            high = mid - 1

    return "Element is not present in array"
n = int(input())
arr = []
for i in range(n):
    arr.append(input().strip())
x = input().strip()
result = binarySearchAppr(arr, 0, len(arr) - 1, x)
print(result)
```

	Test	Input	Expected	Got
✔	binarySearchAppr(arr, 0, len(arr)-1, x)	5 one two three four five two	Element is present at index 4	Element is present at index 4

	Test	Input	Expected	Got
✔	`binarySearchAppr(arr, 0, len(arr)-1, x)`	6 one three five seven nine eleven thirteen	`Element is not present in array`	`Element is not present in array`
✔	`binarySearchAppr(arr, 0, len(arr)-1, x)`	4 two four six eight six	`Element is present at index 2`	`Element is present at index 2`

Passed all tests! ✔

Correct

Marks for this submission: 20.00/20.00.

Question **2**

Correct

Mark 20.00 out of 20.00

Write a Python Program to print the fibonacci series upto n_terms using Recursion.

For example:

Input	Result
10	Fibonacci series: 0 1 1 2 3 5 8 13 21 34
5	Fibonacci series: 0 1 1 2 3
7	Fibonacci series: 0 1 1 2 3 5 8

Answer: (penalty regime: 0 %)

```
def fibonacci(n):
    if n <= 1:
        return n
    else:
        return fibonacci(n-1) + fibonacci(n-2)
n_terms = int(input())
print("Fibonacci series:")
for i in range(n_terms):
    print(fibonacci(i))
```

	Input	Expected	Got	
✔	10	Fibonacci series: 0 1 1 2 3 5 8 13 21 34	Fibonacci series: 0 1 1 2 3 5 8 13 21 34	✔
✔	5	Fibonacci series: 0 1 1 2 3	Fibonacci series: 0 1 1 2 3	✔
✔	7	Fibonacci series: 0 1 1 2 3 5 8	Fibonacci series: 0 1 1 2 3 5 8	✔
✔	9	Fibonacci series: 0 1 1 2 3 5 8 13 21	Fibonacci series: 0 1 1 2 3 5 8 13 21	✔
✔	11	Fibonacci series: 0 1 1 2 3 5 8 13 21 34 55	Fibonacci series: 0 1 1 2 3 5 8 13 21 34 55	✔

Passed all tests! ✔

Correct

Marks for this submission: 20.00/20.00.

Question **3**

Correct

Mark 20.00 out of 20.00

Write a python program to implement merge sort without using recursive function on the given list of values.

For example:

Input	Result
7 33 42 9 37 8 47 5	left: [33] Right: [42] left: [9] Right: [37] left: [8] Right: [47] left: [5] Right: [] left: [33, 42] Right: [9, 37] left: [8, 47] Right: [5] left: [9, 33, 37, 42] Right: [5, 8, 47] [5, 8, 9, 33, 37, 42, 47]
6 10 3 5 61 74 92	left: [10] Right: [3] left: [5] Right: [61] left: [74] Right: [92] left: [3, 10] Right: [5, 61] left: [74, 92] Right: [] left: [3, 5, 10, 61] Right: [74, 92] [3, 5, 10, 61, 74, 92]

Answer: (penalty regime: 0 %)

```
def merge(left, right):
    print("left: ", left)
    print("Right: ", right)
    result = []
    i = j = 0
    while i < len(left) and j < len(right):
        if left[i] <= right[j]:
            result.append(left[i])
            i += 1
        else:
            result.append(right[j])
            j += 1
    result.extend(left[i:])
    result.extend(right[j:])
    return result
def iterative_merge_sort(arr):
    width = 1
    n = len(arr)
    while width < n:
        for i in range(0, n, 2 * width):
            left = arr[i:i + width]
            right = arr[i + width:i + 2 * width]
```

	Input	Expected	Got	
✔	7 33 42 9 37 8 47 5	left: [33] Right: [42] left: [9] Right: [37] left: [8] Right: [47] left: [5] Right: [] left: [33, 42] Right: [9, 37] left: [8, 47] Right: [5] left: [9, 33, 37, 42] Right: [5, 8, 47] [5, 8, 9, 33, 37, 42, 47]	left: [33] Right: [42] left: [9] Right: [37] left: [8] Right: [47] left: [5] Right: [] left: [33, 42] Right: [9, 37] left: [8, 47] Right: [5] left: [9, 33, 37, 42] Right: [5, 8, 47] [5, 8, 9, 33, 37, 42, 47]	✔
✔	6 10 3 5 61 74 92	left: [10] Right: [3] left: [5] Right: [61] left: [74] Right: [92] left: [3, 10] Right: [5, 61] left: [74, 92] Right: [] left: [3, 5, 10, 61] Right: [74, 92] [3, 5, 10, 61, 74, 92]	left: [10] Right: [3] left: [5] Right: [61] left: [74] Right: [92] left: [3, 10] Right: [5, 61] left: [74, 92] Right: [] left: [3, 5, 10, 61] Right: [74, 92] [3, 5, 10, 61, 74, 92]	✔
✔	5 4 12 6 98 3	left: [4] Right: [12] left: [6] Right: [98] left: [3] Right: [] left: [4, 12] Right: [6, 98] left: [3] Right: [] left: [4, 6, 12, 98] Right: [3] [3, 4, 6, 12, 98]	left: [4] Right: [12] left: [6] Right: [98] left: [3] Right: [] left: [4, 12] Right: [6, 98] left: [3] Right: [] left: [4, 6, 12, 98] Right: [3] [3, 4, 6, 12, 98]	✔

Passed all tests! ✔

Correct

Marks for this submission: 20.00/20.00.

Question **4**

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 value

For example:

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

Answer: (penalty regime: 0 %)

```
def search(List, n):
    if n in List:
        print("Found")
    else:
        print("Not Found")
size = int(input())
List = [int(input()) for i in range(size)]
n = int(input())
```

	Test	Input	Expected	Got	
✔	search(List, n)	5 3 4 5 6 7 4	Found	Found	✔

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

Passed all tests! ✔

Correct

Marks for this submission: 20.00/20.00.

Question **5**

Incorrect

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	left: [] right: [] left: [] right: [] left: [1.5] right: [6.4] left: [] right: [] left: [1.5, 2.1, 6.4] 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	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]

Answer: (penalty regime: 0 %)

```
def quick_sort(arr):
    if len(arr) <= 1:
        return arr
    else:
        pivot = arr[0]
        left = [x for x in arr[1:] if x <= pivot]
        right = [x for x in arr[1:] if x > pivot]
        print("left: ", left)
        print("right: ", right)
        return quick_sort(left) + [pivot] + quick_sort(right)
n = int(input())
arr = [float(input()) for i in range(n)]
sorted_arr = quick_sort(arr)
print(sorted_arr)
print(quick_sort(arr))
```

	Input	Expected	Got	
✖	5 6.9 8.3 2.1 1.5 6.4	left: [] right: [] left: [] right: [] left: [1.5] right: [6.4] left: [] right: [] left: [1.5, 2.1, 6.4] right: [8.3] [1.5, 2.1, 6.4, 6.9, 8.3]	left: [2.1, 1.5, 6.4] right: [8.3] left: [1.5] right: [6.4] [1.5, 2.1, 6.4, 6.9, 8.3] left: [2.1, 1.5, 6.4] right: [8.3] left: [1.5] right: [6.4] [1.5, 2.1, 6.4, 6.9, 8.3]	✖

Some hidden test cases failed, too.
Your code must pass all tests to earn any marks. Try again.

Show differences

Incorrect

Marks for this submission: 0.00/20.00.