

Quiz 2

Output Screenshot

Test Cases

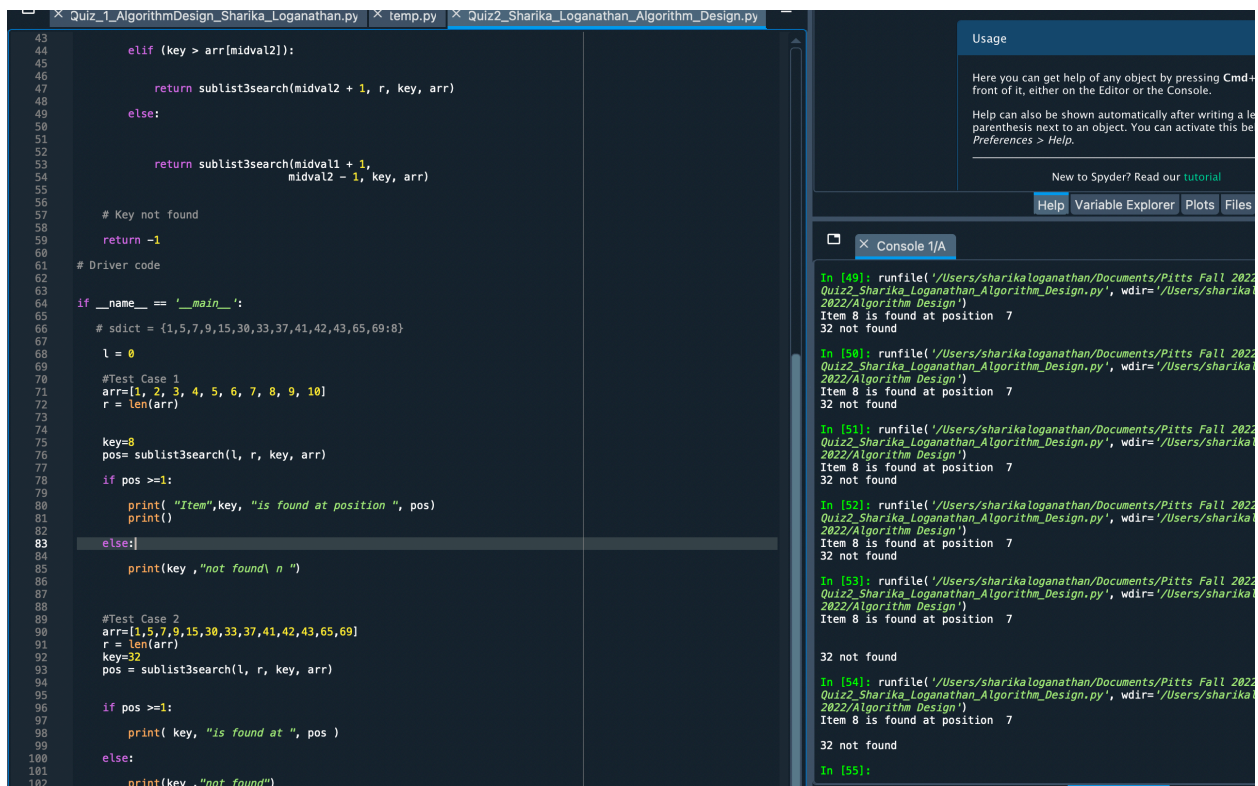
Test Case 1: Find 8 in {1, 2, 3, 4, 5, 6, 7, 8, 9, 10}

Test Case 2: Find 32 in {1,5,7,9,15,30,33,37,41,42,43,65,69}

```
In [54]: runfile('/Users/sharikaloganathan/Documents/Pitts Fall 2022/Algorithm Design/
Quiz2_Sharika_Loganathan_Algorithm_Design.py', wdir='/Users/sharikaloganathan/Documents/Pitts Fall
2022/Algorithm Design')
Item 8 is found at position 7

32 not found

In [55]: |
```



The screenshot shows the Spyder IDE interface. The left pane displays a Python script named `Quiz2_Sharika_Loganathan_Algorithm_Design.py`. The script implements a binary search algorithm. It includes a `sublist3search` function and a driver code section. The driver code defines two test cases: `Test Case 1` with `arr=[1, 2, 3, 4, 5, 6, 7, 8, 9, 10]` and `key=8`, and `Test Case 2` with `arr=[1,5,7,9,15,30,33,37,41,42,43,65,69]` and `key=32`. The right pane shows the console output, which matches the output shown in the 'Output Screenshot' block above. The console shows the results of running the script multiple times, with the first run finding the item at position 7 and subsequent runs showing '32 not found'.

```
43 elif (key > arr[midval2]):
44
45     return sublist3search(midval2 + 1, r, key, arr)
46
47 else:
48
49     return sublist3search(midval1 + 1,
50                           midval2 - 1, key, arr)
51
52
53 # Key not found
54 return -1
55
56 # Driver code
57
58 if __name__ == '__main__':
59     # sdict = {1,5,7,9,15,30,33,37,41,42,43,65,69:8}
60
61     l = 0
62     #Test Case 1
63     arr=[1, 2, 3, 4, 5, 6, 7, 8, 9, 10]
64     r = len(arr)
65
66     key=8
67     pos= sublist3search(l, r, key, arr)
68
69     if pos >=1:
70         print( "Item",key, "is found at position ", pos)
71         print()
72     else:
73         print(key , "not found\ n ")
74
75     #Test Case 2
76     arr=[1,5,7,9,15,30,33,37,41,42,43,65,69]
77     r = len(arr)
78     key=32
79     pos = sublist3search(l, r, key, arr)
80
81     if pos >=1:
82         print( key, "is found at ", pos )
83     else:
84         print(key , "not found")
```

Usage

Here you can get help of any object by pressing **Cmd+** front of it, either on the Editor or the Console.

Help can also be shown automatically after writing a left parenthesis next to an object. You can activate this behavior in **Preferences > Help**.

New to Spyder? Read our [tutorial](#)

Help Variable Explorer Plots Files

Console 1/A

```
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Item 8 is found at position 7
32 not found

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