Quiz

It's quiz time! Test yourself by solving these questions about binary search.

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1 Binary search is only applicable in case of sorted lists.

○ A) True

○ B) False

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2 What is the worst-case time complexity of the recursive approach of a binary search?

○ A) $O(logn)$

○ B) $O(n)$

○ C) $O(nlogn)$

○ D) $O(2n)$

3 What is the worst-case time complexity of the iterative approach of a binary search?

○ A) $O(logn)$

○ B) $O(n)$

○ C) $O(nlogn)$

○ D) $O(2n)$

4 Binary search works by comparing the target element with the values on the first and the last index of a list.

○ A) True

○ B) False

5 What is the output of the following code?

```
def binary_search_recursive(data, target, low, high):
    if low > high:
        return False
    else:
```

```python
        mid = (low + high) // 2
        if target < data[mid]:

            return binary_search_recursive(data, target, low, mid-1)
        else:
            return binary_search_recursive(data, target, mid+1, high)
data = [2,4,5,7,8,9]
target = 2
print(binary_search_recursive(data, target, 0, 5))
```

A) 2

B) True

C) False

D) No output

CHECK ANSWERS