

# Homework Quiz - Week 15 Results for Murshed SK

❗ Correct answers are hidden.

Score for this attempt: 10 out of 10

Submitted Feb 12 at 11:40pm

This attempt took 2 minutes.



## Question 1

1 / 1 pts

In Problem #1.1, which marked\_item would be found in the fewest queries?

- ☐ 5
- ☐ 12
- ☐ 99
- ☒ 3
- ☐ It is impossible to predict.



## Question 2

1 / 1 pts

In Problem #1.1, which marked\_item would be found in the most queries?

- ☐ 5
- ☐ 12
- ☒ 99
- ☐ 3
- ☐ It is impossible to predict.



## Question 3

1 / 1 pts

In problem #1.2, for num=100 and target=16, how many queries would it take to find the marked\_item?

- ☐ 16
- ☒ 17
- ☐ 100

- ☐ 1
- ☐ It is impossible to predict.



#### Question 4

1 / 1 pts

In problem #1.2, for num=10, which of these values for target would return the marked\_item in 4 queries?

- ☐ 1
- ☒ 3
- ☐ 4
- ☐ 5
- ☐ 10



#### Question 5

1 / 1 pts

How does Big O compare for the two algorithms in Problem #1.2 and #2.2.

- ☐ Big O is smaller for #1.2 than #2.2.
- ☒ Big O is larger for #1.2 than #2.2.
- ☐ Big O is the same size for #1.2 and #2.2.
- ☐ Big O is sometimes smaller and sometimes larger for #1.2 than #2.2 depending on the value of the target variable.
- ☐ Big O cannot be calculated for the algorithms in #1.2 and #2.2.



#### Question 6

1 / 1 pts

In Problem #2.2, for num=100, what target would be found in the fewest queries?

- ☐ 0
- ☐ 25
- ☒ 49
- ☐ 50
- ☐ 98



### Question 7

1 / 1 pts

In Problem #2.2, for num=100, what target would be found in the most queries?

- ☒ 0
- ☐ 25
- ☐ 33
- ☐ 49
- ☐ 75



### Question 8

1 / 1 pts

How does the number of searches compare for lin\_search and bin\_search in Problem #2.3?

- ☐ lin\_search was more efficient.
- ☒ bin\_search was more efficient.
- ☐ lin\_search and bin\_search found the number in the same number of queries.
- ☐ lin\_search found the number while bin\_search did not.
- ☐ bin\_search found the number while lin\_search did not.



### Question 9

1 / 1 pts

How does the number of searches compare for lin\_search and bin\_search in Problem #2.4?

- ☒ bin\_search was more effective for all size ranges.
- ☐ lin\_search was more effective for all size ranges.
- ☐ lin\_search was more effective for ranges with fewer than 100 elements, bin\_search was more effective for ranges with 100 elements or more.
- ☐ bin\_search was more effective for ranges with fewer than 100 elements, lin\_search was more effective for ranges with 100 elements or more.
- ☐ There was no pattern when it came to the effectiveness of the two algorithms.



### Question 10

1 / 1 pts

For num=100, which entry would be returned in fewer searches by lin\_search than by bin\_search?

- ☒ 5
- ☐ 10
- ☐ 25
- ☐ 50
- ☐ 98

Quiz Score: 10 out of 10