Congratulations! You passed!

Grade received 80% To pass 80% or higher

Go to next item

1. Given an array of 12 numbers `-> 1,45,5,34,23,5,82,12,35,21,8,9` **1 / 1 point**

And a hashing function modulus 6. How many collisions would you expect to have in your table?

- (•) 6
- ( ) 7
- ( ) 4
- ( ) 5

Correct
That's correct. Applying the hashing function led to generating 6 collisions.

2. What data structure would be most suitable for mimicking the actions of a hashtable? **1 / 1 point**

- ( ) Queue
- ( ) Stack
- (•) Dictionaries

Correct
That's correct. Some languages that do not have built-in hashtable types use dictionaries to emulate the behavior.

3. What value is stored at the root of a min_heap? **1 / 1 point**

- (•) The lowest value
- ( ) The highest value
- ( ) The last inserted value

Correct
That's correct. A min heap stores in order of lowest to highest

4. Why is the travelling salesman used in graphs? **0 / 1 point**

- (•) Because the distance between two nodes reflects distance in real life.
- ( ) Because the analogy of travelling can be related to the number of connected nodes.
- ( ) Because graphs store information in a fixed way so that every node is the exact same distance apart. Allowing us apply travel times to it.

Incorrect
Not quite. Distance can be used as an edge weight between two nodes, but it does not necessarily have to reflect miles. A distance between two nodes can infer similarity between topics. The closer data elements are to one another the more likely they are related in some way.

5. In relation to computer science what is a clique? **1 / 1 point**

- (•) It is a subset of a graph that has found to have strong internal connections and weak external ones.
- ( ) It is a social group that one actively engages with.
- ( ) It is a memory feature that allows for quick lookup of one's social circle.

Correct
That's correct. It can be determined by analyzing the interconnectedness of nodes and comparing them to external nodes.