Quiz 14

Due Jun 1 at 11:59pm   **Points** 13   **Questions** 13
Available until Jun 1 at 11:59pm   **Time Limit** None

Instructions

Answer the following questions.

This quiz is no longer available as the course has been concluded.

Attempt History

	Attempt	Time	Score
LATEST	**Attempt 1**	15 minutes	12 out of 13

Score for this quiz: **12** out of 13
Submitted Jun 1 at 6:35pm
This attempt took 15 minutes.

Question 1	1 / 1 pts

Shell sort uses selection sort to sort interleaved lists.

○ True

Correct!   ⦿ False

Question 2   1 / 1 pts

In shell sort, the gap value shows the distance between two consecutive items within the same interleaved list.

Correct!

◉ True

◯ False

Question 3   1 / 1 pts

Consider the following numbers within a list in order: 4, 6, 1, 3, 2, 5.

If gap value is 3, what would be the content of interleaved lists (before sort)?

List #1: 4, 6

List #2: 1, 3

◯ List #3: 2, 5

List #1: 4, 6, 1

◯ List #2: 3, 2, 5

Correct!

List #1: 4, 3

List #2: 6, 2

◉ List #3: 1, 5

List #1: 4, 1, 2

○ List #2: 6, 3, 5

Question 4   1 / 1 pts

Consider the following numbers within a list in order: 4, 6, 1, 3, 2, 5.

If gap value is 3, what would be the content of the list after sorting all interleaved lists?

○ 1, 4, 6, 2, 3, 5

○ 4, 6, 1, 3, 2, 5

○ 1, 3, 2, 5, 4, 6

Correct!   ⊙ 3, 2, 1, 4, 6, 5

Question 5   1 / 1 pts

In shell sort, if gap value is 1, then effectively insertion sort is executed on the whole list.

Correct!   ⊙ True

○ False
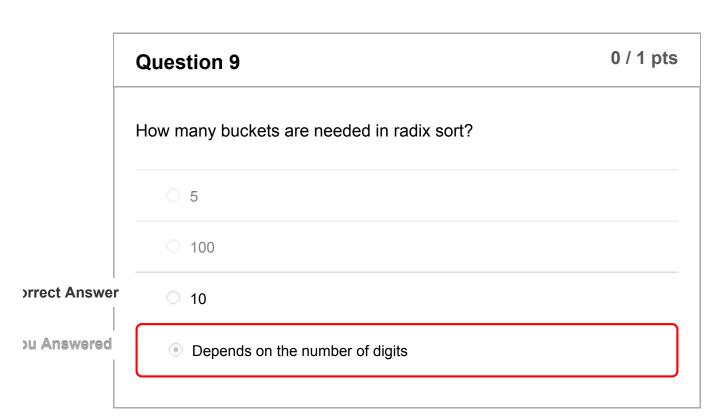
Question 6　　　　　　　　　　　　　　　　　　1 / 1 pts

Radix sort is only applicable to sorting integer numbers.

Correct!

　◉　True

　○　False

Question 7　　　　　　　　　　　　　　　　　　1 / 1 pts

Numbers 41 and 6748 can sit in the same bucket.

Correct!

　◉　True

　○　False

Question 8　　　　　　　　　　　　　　　　　　1 / 1 pts

What is 6748 bucket, using 100's digit?

　○　8

　○　0

Correct!

○ 4

◉ 7

Question 9   0 / 1 pts

How many buckets are needed in radix sort?

○ 5

○ 100

Correct Answer

○ 10

You Answered

◉ Depends on the number of digits

Question 10   1 / 1 pts

Consider the following list of numbers in order: 85, 63, 77, 93, 51.

What would be the content of the list, after the first iteration of radix sort?

○ 51, 63, 77, 85, 93

Correct!

◉ 51, 63, 93, 85, 77

○ 93, 51, 63, 85, 77

○ 77, 63, 93, 51, 85

Question 11

1 / 1 pts

Consider the following list of numbers in order: 85, 63, 77, 93, 51.

How many iterations radix sort follow, before sorting the numbers?

Correct!

◉ 2

○ 10

○ 3

○ 93

Question 12

1 / 1 pts

One major difference between radix sort and other sorting algorithms is that radix sort does not use comparison.

Correct!

◉ True

○ False

Question 13   1 / 1 pts

Which one of the following is the fastest sorting algorithm (comparing worst case runtime)?

○ Insertion sort

○ Quick sort

○ Merge sort

Correct!   ◉ Radix sort

Quiz Score: **12** out of 13