

# M2: Hands-On: Sorting Results for Honey Reddy Nagireddy

Score for this attempt: **4** out of 4

Submitted Feb 12 at 6:47pm

This attempt took 8 minutes.

## Question 1

1 / 1 pts

Given the array  $a = [66, 67, 20, 86, 55, 74, 11, 91, 43, 47]$  which sorting algorithm would perform the following sequence of array modifications?

[66, 67, 20, 86, 55, 74, 11, 91, 43, 47]  
[20, 66, 67, 86, 55, 74, 11, 91, 43, 47]  
[20, 66, 67, 86, 55, 74, 11, 91, 43, 47]  
[20, 55, 66, 67, 86, 74, 11, 91, 43, 47]  
[20, 55, 66, 67, 74, 86, 11, 91, 43, 47]  
[11, 20, 55, 66, 67, 74, 86, 91, 43, 47]  
[11, 20, 55, 66, 67, 74, 86, 91, 43, 47]  
[11, 20, 43, 55, 66, 67, 74, 86, 91, 47]  
[11, 20, 43, 47, 55, 66, 67, 74, 86, 91]

- A. selection sort
- B. insertion sort
- C. merge sort
- D. quicksort

☐ A

☒ B

☐ C

☐ D

Correct!

## Question 2

1 / 1 pts

Given the array  $a = [66, 67, 20, 86, 55, 74, 11, 91, 43, 47]$  which sorting algorithm would perform the following sequence of array modifications?

[11, 67, 20, 86, 55, 74, 66, 91, 43, 47]  
[11, 20, 67, 86, 55, 74, 66, 91, 43, 47]  
[11, 20, 43, 86, 55, 74, 66, 91, 67, 47]  
[11, 20, 43, 47, 55, 74, 66, 91, 67, 86]  
[11, 20, 43, 47, 55, 74, 66, 91, 67, 86]  
[11, 20, 43, 47, 55, 66, 74, 91, 67, 86]  
[11, 20, 43, 47, 55, 66, 67, 91, 74, 86]  
[11, 20, 43, 47, 55, 66, 67, 74, 91, 86]  
[11, 20, 43, 47, 55, 66, 67, 74, 86, 91]  
[11, 20, 43, 47, 55, 66, 67, 74, 86, 91]

- A. selection sort
- B. insertion sort
- C. merge sort
- D. quicksort

Correct!

☒ A

☐ B

☐ C

☐ D

Question 3

1 / 1 pts

Given the array  $a = [66, 67, 20, 86, 55, 74, 11, 91, 43, 47]$  which sorting algorithm would perform the following sequence of array modifications?

[66, 67, 20, 86, 55, 74, 11, 91, 43, 47]  
[20, 66, 67, 86, 55, 74, 11, 91, 43, 47]  
[20, 66, 67, 55, 86, 74, 11, 91, 43, 47]  
[20, 55, 66, 67, 86, 74, 11, 91, 43, 47]  
[20, 55, 66, 67, 86, 11, 74, 91, 43, 47]  
[20, 55, 66, 67, 86, 11, 74, 91, 43, 47]  
[20, 55, 66, 67, 86, 11, 74, 91, 43, 47]  
[20, 55, 66, 67, 86, 11, 43, 47, 74, 91]  
[11, 20, 43, 47, 55, 66, 67, 74, 86, 91]

- A. selection sort
- B. insertion sort
- C. merge sort
- D. quicksort

☐ A

☐ B

☒ C

☐ D

Correct!

#### Question 4

1 / 1 pts

Which of the arrays below would be the final result of *partitioning* the following portion of an array using 59 as the pivot in the quicksort partition implementation presented in lecture? Only the partitioning operation is happening.

[97, 20, 84, 24, 25, 59, 93, 13, 94]

- A. [20, 93, 13, 97, 59, 24, 25, 94, 84]
- B. [94, 93, 97, 84, 59, 20, 24, 25, 13]
- C. [20, 24, 25, 13, 59, 94, 93, 97, 84]
- D. [20, 24, 84, 97, 59, 13, 25, 93, 94]

☐ A

☐ B

Correct!

☒ C

☐ D

Quiz Score: **4** out of 4