

☐  $O(n \log n)$

☐  $O(2^n)$

Question 5

0 / 1 point

How many possible solutions are there for an instance of the assignment problem of size  $n=5$ ?

☐ 12

☐ 24

☒ 60

☐ 120

☐ none of these answers are correct

**Question 1****1 / 1 point**

All sorting algorithms are Brute Force algorithms.

- ☐ True  
✓ ☒ False

**Question 2****1 / 1 point**

Determine the number of character comparisons made when searching for pattern P in text T using Brute Force technique.

T=NOONNOONNOONOO  
P=BOO

Answer: 10 ✓

**Question 3****1 / 1 point**

Insertion Sort is a decrease-by-a-constant-factor (half) algorithm.

- ☐ True  
✓ ☒ False

**Question 4****1 / 1 point**

What is the worst case efficiency class of the Brute Force String Match algorithm?

- ☐  $O(1)$
- ☐  $O(n)$
- ☐  $O(n^2)$
- ☒ none of the above

**Question 5****1 / 1 point**

How many possible solutions are there for an instance of the assignment problem of size  $n=5$ ?

- ☐ 12
  - ☐ 24
  - ☐ 60
  - ☒ 120
  - ☐ none of these answers are correct
-

**Question 1****1 / 1 point**

All Brute Force algorithms are  $O(n^2)$ .

- ☐ True  
✓ ☒ False

**Question 2****1 / 1 point**

Determine the number of character comparisons made when searching for pattern P in text T using Brute Force technique.

T=NO\_NO\_NO\_NO  
P=DOT

Answer: 9 ✓

**Question 3****1 / 1 point**

Insertion Sort is a decrease-by-one algorithm.

- ✓ ☒ True  
☐ False

**Question 4****1 / 1 point**

What is the worst case efficiency class of the Brute Force String Match algorithm?

- ☐  $O(1)$
- ☐  $O(n^2)$
- ☒ none of the above
- ☐  $O(n)$

**Question 5****1 / 1 point**

How many possible solutions are there for an instance of the assignment problem of size  $n=5$ ?

- ☐ 12
- ☐ 24
- ☐ 60
- ☒ 120
- ☐ none of these answers are correct

**Question 1****1 / 1 point**

All sorting algorithms are Brute Force algorithms.

- ☐ True  
✓ ☒ False

**Question 2****0 / 1 point**

Determine the number of character comparisons made when searching for pattern P in text T using Brute Force technique.

T=NO\_NO\_NO\_NO  
P=DOT

Answer: 10 ✗ (9)

**Question 3****0 / 1 point**

Insertion Sort moves an element into the correct position by continually swapping it with adjacent elements, until no further swaps are possible.

- ✗ ☒ True  
⚡ ☐ False

**Question 4****1 / 1 point**

What is the worst case efficiency class of Bubble Sort?

- ☐  $O(\log n)$
- ☐ none of the above
- ☐  $O(n^3)$
- ☐  $O(1)$
- ☐  $O(n!)$
- ☒  $O(n^2)$
- ☐  $O(2^n)$
- ☐  $O(n \log n)$
- ☐  $O(n)$

How many possible solutions are there for an instance of the assignment problem of size  $n=5$ ?

- ☐ 12
- ☐ 24
- ☐ 60
- ✓ ☒ 120
- ☐ none of these answers are correct



You successfully submitted your quiz.

**Question 1****1 / 1 point**

All Brute Force algorithms are  $O(n^2)$ .

☐ True☒ False**Question 2****1 / 1 point**

Determine the number of character comparisons made when searching for pattern P in text T using Brute Force technique.

T=NOONNOONNOONOO

P=BOO

Answer: 10 ✓

**Question 3****1 / 1 point**

Question 3

1 / 1 point

Insertion Sort is a decrease-by-one algorithm.

- ✓ ☒ True  
☐ False

Question 4

1 / 1 point

What is the worst case efficiency class of Bubble Sort?

- ☐  $O(n)$   
☐  $O(n!)$   
☐  $O(1)$   
☐  $O(n^3)$   
✓ ☒  $O(n^2)$   
☐ none of the above  
☐  $O(\log n)$