

Q07. 2D Arrays

Started: Nov 6 at 9:05am

Quiz Instructions

Question 1

1 pts

The following table shows the results after each pass of a sorting algorithm for just the first 3 passes. What kind of sort is being performed?

```
21 40 29 77 45 92 28 61
40 21
40 29 21
77 40 29 21
```

- ☐ Selection sort, ascending order
- ☐ Selection sort, descending order
- ☐ Insertion sort, ascending order
- ☒ Insertion sort, descending order

Question 2

1 pts

How many steps are required to successfully swap the values in two variables?

- ☐ 0
- ☐ 1
- ☐ 2
- ☒ 3
- ☐ 4

Question 3**1 pts**

Given the following declaration:

```
double[][] y = {{ 1, 2, 3, -1}, {4, 5, 6, 0}, {7, 8, 9, 10}};
```

What is the proper syntax to access the -1?

☐ y[3][0]

☒ y[0][3]

☐ y[1][4]

☐ y[1, 4]

Question 4**1 pts**

In order to visit every element in a 2-dimensional array, what control structure design do you need?

☐ A single loop

☒ A loop nested within another loop

☐ A loop nested in an if statement

☐ A single loop followed by another single loop

Question 5**1 pts**

Which sort algorithm begins with the algorithm below?

start at index 1

copy array value into temporary storage

compare temporary to index 0 - if element 0 is less than element 1,

shift element 0 to element 1

put temporary value into element 0

- ☐ bubble sort
- ☒ insertion sort
- ☐ selection sort

Question 6**1 pts**

Which of the following is legal syntax to return a 2-dimensional array?

- ☐ `public String[][] method(){...}`
- ☐ `public int [][] method(){...}`
- ☐ `public double[][] method(){...}`
- ☒ All of the above
- ☐ Only the 2nd and 3rd choice. You can't have a 2-dimensional array of Strings

Question 7**1 pts**

Given a 2-dimensional array of ints, what will the following code do?

```
int sum = 0;
for (int r = 0; r < array.length; r++) {
    for ( c = 0; c < array[r].length; c++)
        sum += array[r][c];
}
System.out.println(sum);
```

- ☐ Prints out the sum of each row
- ☐ Prints out the sum of each column
- ☒ Prints out the sum of the entire array

Question 8**1 pts**

DIFFERENT FROM THE PREVIOUS QUESTION

Given a 2-dimensional array of ints, what will the following code do?

```
int sum = 0;
for (int r = 0; r < array.length; r++, sum = 0) {
    for ( c= 0; c < array[r].length; c++)
        sum += array[r][c];
    System.out.println(sum);
}
```

- ☐ Prints the sum of each column
- ☒ Prints the sum of each row
- ☐ Prints the sum of all the elements of the array

Question 9**1 pts**

Which sort algorithm is described below?

set top of unsorted array to 0

search array from top to end to find index of largest entry

swap value at top of array with value at index of largest entry

increment top

repeat until end of loop

- ☐ bubble sort
- ☒ selection sort
- ☐ insertion sort

Question 10**1 pts**

You can swap 2 rows of a 2-dimensional array

☒ True

☐ False

Quiz saved at 9:14am

Submit Quiz