

Quiz10 - Results



Attempt 1 of 1

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Attempt Score 9 / 10 - 90 %

Overall Grade (Highest Attempt) 9 / 10 - 90 %

Question 1

2 / 2 points

Which of the following headers is correct to swap two double values (eg. x and y).

- ✓ ☐ public static void swap(double x, double y)
- ✓ ☒ public static void swap(double [] data) // where data[0] = x and data[1] = y
- ✓ ☒ public static void swap(double [] data, int i, int j)
//where data[i] = x and data[j] = y
- ✓ ☐ public static void swap(Double x, Double y) //where Double is a class for
//primitive double type, and Double objects are immutable

Question 2

2 / 2 points

What is the task of the unknown method, where x is positive integer?

```
//precondition: x>0
public static int unknown(int x, int y){
    if (x==1)
        return y;
    return y + unknown(x-1, y);
}
```

- ✓ ☒ method is working fine and calculates the product of x and y
- ☐ there is syntax error

- ☐ there is logical error.
- ☐ method is working fine and calculates the remainder of y by x

Question 3**2 / 2 points**

Fill the blank in the following method that given an array, it returns the biggest index of lowest value in the array:

```
public static int findIndexOfLowest(int[] arr){  
    int min=0;  
    for(int j=1;j<arr.length;j++)  
        if(_____  
            min=j;  
    return min;  
}
```

- ☐ arr[j] < arr[min]
- ☐ arr[j] >= arr[min]
- ✓ ☒ arr[j] <= arr[min]
- ☐ arr[j] > arr[min]

Question 4**1 / 1 point**

Which of the following statements is NOT correct?

- ☐ Binary search can be implemented by recursive methods.
- ☐ Sequential search is a linear algorithm but binary search is logarithmic one.
- ✓ ☒ Applying binary search is always more efficient algorithm than sequential search
- ☐ Bubble sort is better than selection sort if the data are almost sorted



Question 5**1 / 1 point**

Time complexity is a means of finding the most efficient algorithm to solving a given problem.

- ✓ ☒ True
- ☐ False


Question 6**0 / 1 point**

Which of the following statements is NOT correct?

- ☐ A recursive method calls itself
- ☐ A recursive method must have base case
-  ☒ A recursive method is always better than iterative method for solving a given task.
-  ☐ A recursive method has always an overhead for the function/method calls.

Question 7**1 / 1 point**

When there are more than a solution for a problem, the solution with the lowest time complexity is the best algorithm (solution) amongst them.

-  ☒ True
- ☐ False

Done