Coding Test - No.2

Name: _________________

1 - In the best case, what is the time complexity of the bubble sorting algorithm?
   A. O(N)    B. O(NLogN)  C. O(1)    D. O(N^2)

2 - for array [5, 4, 3, 2, 1], after the first round of bubble sorting what will it be?

3 - for array [5, 4, 3, 2, 1], after the first round of insertion sorting what will it be?

4 - for array [5, 4, 3, 2, 1], after the first round of selection sorting what will it be?

5 - Which of the following declares a tuple in Python?
   A - [1,2,3]      B - (1, 2, 3)     C - {1, 2, 3}    D - [(1,2,3)]

6 - Regarding a = (1, 2, 3);  a[0] = 1
   A - the first element is changed to 1.
   B - exception is raised as we can't modify a tuple

7 - With Binary Search Algorithm, how many times in the worst case can we find a number in
   a sorted list with 100 elements?
   A - 100      B -  50       C - 10        D - 7

8 - With Linear Search Algorithm, how many times in the worst case can we find a number in
   a list with 100 elements?
   A - 100      B -  50       C - 10        D - 7

9 - Convert 1110 (binary) to decimal

10 - Complete the following code to check if a string is a palindrome using two pointers:

def isPalindrome(s):
    i, j = 0, len(s) - 1
    while i < j:
        if s[i] != s[j]:
            ________
            i += 1
            ________
    return ________