

Name \_\_\_\_\_

CSE 8B

Student PID \_\_\_\_\_

VERSION A

Quiz 1  
Winter 2016

Signature \_\_\_\_\_

This quiz is to be taken **by yourself** with closed books, closed notes, no electronic devices. Write your answers on the answer sheet!

(Partial) Operator Precedence Table

Operators				Associativity
!	++	--	(pre & post inc/dec)	right to left
*	/	%		left to right
+	-			left to right
<	<=	>	>=	left to right
==	!=			left to right
&&				left to right
				left to right
=				right to left

**Problem 1 (3 pts):** Using the operator precedence table above, state the values of each of the following expressions.

```
int x = 6, y = 3, z = 2;
```

- a. `boolean exp1 = x == z * z + 1;` **5**  
 b. `boolean exp2 = !(x / z > y) && (y * z >= x);` **true**  
 c. `boolean exp3 = false || true && !false;` **true**

**Problem 2 (2 pts):** What gets printed with each of the following statements?

```
int a = 7, b = 2, c = 0;
```

- A. `System.out.println( "Statement 1 is: " + a + (b + c) + " = " + (a + b) + c );` **72 = 90**  
 B. `System.out.println( a + b + (c + " = ") + a + (b + c) );` **90 = 72**

**Problem 3 (4 pts):** What gets printed when the following program is run?

```
public class MyArray
{
    public static void main( String[] args ) {
        int [] a = {12, 5, -13};
        for(int i=0; i< a.length; i++)
        {
            int min = i;
            for(int j=i; j<a.length; j++)
            {
                if(a[j] < a[min])
                {
                    min = j;
                }
            }

            swap(a, i, min);
            System.out.print(a[i] + ", ");
        }
    }

    public static void swap(int[] a, int i, int j)
    {
        int temp = a[i];
        a[i] = a[j];
        a[j] = temp;
    }
}
```

**-13,5,12**

**Problem 4 (4 pts):** What gets printed when this program is run?

```
public class Trace {
    public static void main( String[] args ) {

        int[] index = {3, 2, 1, 2};
        int i = index.length - 1;
        while( i >= 0 )
        {
            bar(index[i]);
            i--;
        }

        public static void bar(int i) {
            if(i == 1)
            {
                bar1();
                System.out.print("-");
            }
            else if(i == 2)
            {
                bar2();
                System.out.print("-");
            }
            else
            {
                bar3();
                System.out.print("-");
            }
        }

        public static void bar1() {
            System.out.print( "A" );
        }

        public static void bar2() {
            System.out.print( "B" );
        }

        public static void bar3() {
            System.out.print( "Y" );
        }
    }
}
```

B-A-B-Y-

**Problem 5 (3 pts):** What are the results of following expressions?

```
String s1 = "Good Luck";
String s2 = "Good Morning";
String s3 = "Good Luck";
```

substring(from this int, to this int)

a. boolean ans1 = s3.contains(s2.substring(0, 5)); **true**  
b. char ans2 = s2.charAt(5); **M**  
c. boolean ans3 = s1 == s3; **false**

**Problem 6 (3 pts):** What are the values of x, y, z after the following code segments are executed?

```
int x = 8, y = 2, z = 1;

if ( ++x > 9 || y-- < 4 )
    z = x-- + ++y;
else
    z = ++x + y--;
```

**x = 8**  
**y = 2**  
**z = 11**