

Signature \_\_\_\_\_

CSE 11

Name \_\_\_\_\_

Quiz 5

cs11f \_\_\_\_\_

Fall 2009

Student ID \_\_\_\_\_

This quiz is to be taken **by yourself** with closed books, closed notes, no calculators.

Given the following partial class definition for Point, fill in the blanks to complete the class definition:

```
public class Point
{
    private int x;
    private int y;

    public Point( int x, int y )
    {
        setX( x );
        setY( y );
    }

    public int getX()
    {
        _____;
    }

    public int getY()
    {
        _____;
    }

    public void setX( int x )
    {
        _____;
    }

    public void setY( int y )
    {
        _____;
    }
}
```

Assume you are given the array definition below and the array is properly initialized:

```
Point[] points = new Point[10];
// Assume array points is properly and fully initialized here
```

Without using any extra variables other than the variable **points**, write the single Java statement to change the first Point's x value to be the same value as the last Point's y value. Do not use any magic numbers or integer constants other than 0 or -1.

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If we tried to access points[55], what Runtime exception would be thrown?

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Given the following class definitions for class Foo, class Fubar, and class FubarTest:

```
public class Foo
{
    public Foo()
    {
        System.out.println( "Foo ctor #1" );
    }

    public Foo( int x, int y )
    {
        System.out.println( "Foo ctor #2" );
    }

    public String toString()
    {
        System.out.println( "Foo.toString" );
        return "Foo.toString";
    }
}
```

```
public class FubarTest
{
    public static void main( String[] args )
    {
        Foo ref = new Fubar( 5, 10 );

        System.out.println( "-----" );

        System.out.println( ref.toString() );
    }
}
```

What is the output when we run FubarTest as in  
**java FubarTest**

```
public class Fubar extends Foo
{
    public Fubar( int x, int y )
    {
        this( x, y, -99 );
        System.out.println( "Fubar ctor #1" );
    }

    public Fubar( int x, int y, int z )
    {
        super( x, y );
        System.out.println( "Fubar ctor #2" );
    }

    public String toString()
    {
        System.out.println( "Fubar.toString" );
        return super.toString() + " + " +
            "Fubar.toString";
    }
}
```

Given the following class definition:

```
public class Quiz5
{
    private int q5 = 5;
}
```

Write the equivalent class definition explicitly showing everything the Java compiler implicitly inserts by default. Underline the parts the Java compiler will automatically include as it compiles into bytecode.

What question would you like to see on the Final Exam?