

Signature _____

CSE 11

Name _____

Quiz 4

cs11f _____

Fall 2010

Student ID _____

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

What is the output produced by the following program? (Hint: draw stack frames)

```
public class Mystery
{
    public static void main( String[] args )
    {
        Mystery ref = new Mystery();

        System.out.println( ref.mystery( 10 ) );
    }

    private int mystery( int a )
    {
        int b = a + 5;

        if ( b >= 10 )
        {
            System.out.println( a );
            b = a + mystery( a - 2 );
            System.out.println( b );
        }
        else
        {
            System.out.println( "Yield!" );
            b = a + 2;
            System.out.println( a );
        }

        return b;
    }
}
```

Output

Given the following array declaration:

```
int[] a = { 1, 3, 5, 7, 9 };
```

Fill in the blanks to print out each element:

```
_____ ( int i = _____ ; i < _____ ; _____ )
```

```
System.out.println( _____ );
```

Now do the same using a foreach loop:

```
_____ ( int i _____ _____ )
```

```
System.out.println( _____ );
```

Indicate whether each of the following parts of a Java program is (A-H) and where in the Java Runtime Environment each part lives (1-3)

- A) Class (static) variable
- B) Instance variable
- C) Static method
- D) Instance method
- E) Local variable
- F) Formal Parameter
- G) Constructor
- H) Class definition

- 1) The Class Area
- 2) The Heap
- 3) Stack Frame in the Runtime Stack

	Java program part (Answer A-H in this column)	Java Runtime area (Answer 1-3 in this column)
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public class F10	_____	F10	
{			
private char actor;	_____	actor	_____
public F10() { }	_____	F10	_____
public void setActor(char ch) { actor = ch; }	_____	ch	_____
	_____	setActor	_____
public static int cling;	_____	cling	_____
}			
public class SomeOtherClass	_____	SomeOtherClass	
{			
private int cling;	_____	cling	_____
public static void main(String[] args)	_____	args	_____
{	_____	main	_____
	_____	toon	_____
char toon = '?';	_____	toon	_____
F10 ref1;	_____	ref1	_____
ref1 = new F10();		(where ref1 is pointing)	_____
SomeOtherClass ref2 = new SomeOtherClass();	_____	ref2	_____
// Other Code ... possibly changes the value in toon		(where ref2 is pointing)	_____
...			
}			
public char fubar(char tester) { ... }	_____	tester	_____
	_____	fubar	_____
}			