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

```java
public class Swap {
    private int a;

    public Swap( int a ) {
        this.a = a;
    }

    public void swap( int a, int b ) {
        int tmp;
        tmp = a;
        a = b;
        b = tmp;
    }

    public void swap( Swap ref ) {
        int tmp;
        tmp = this.a;
        this.a = ref.a;
        ref.a = tmp;
    }

    public static void main( String[] args ) {
        int a = 15;
        int b = 20;
        Swap ref1 = new Swap(5);
        Swap ref2 = new Swap(10);
        ref1.swap( a, b );
        System.out.println( a );
        System.out.println( b );
        ref1.swap( ref2 );
        System.out.println( ref1.a );
        System.out.println( ref2.a );
    }
}
```

What is the initial value of each array element in the following arrays?

- `int[] a = new int[5];` _______
- `Integer c = new Integer[7];` _______
- `boolean[] b = new boolean[3];` _______
- `double d = new double[4];` _______
Given the following array declaration:
```
int[] a = { 1, 1, 2, 3, 5, 8, ... }; // You do not know how many values are in the initializer list
```

Fill in the blanks to print out each element:
```
for ( int i = ___________ ; i < ___________ ; ___________ )
    System.out.println( ___________ );
```

Now do the same using a foreach (enhanced for) loop:
```
___________ ( int i ___________ ___________ )
    System.out.println( ___________ );
```

Now do the same using a while loop:
```
___________
while ( ________________ )
{
    ___________________________
    ___________________________
}
```

In general, if you override the equals() method you should also override the ________________ method.

Given the following diagram of an array of array:

What is the output from the following:
```
System.out.println( a == b ); ___________
System.out.println( a[0] == b[0] ); ___________
System.out.println( a.equals(b) ); ___________
System.out.println( a[0].equals(b[0]) ); ___________
System.out.println( b.length ); ___________
System.out.println( b[1].length ); ___________
```

Write the code to check for exact type equivalence between two objects referenced by variables o1 and o2:
```
if ( ____________________________ )
    System.out.println( "o1 and o2 reference the exact same type of object" );
else
    System.out.println( "o1 and o2 reference different types of objects" );
```