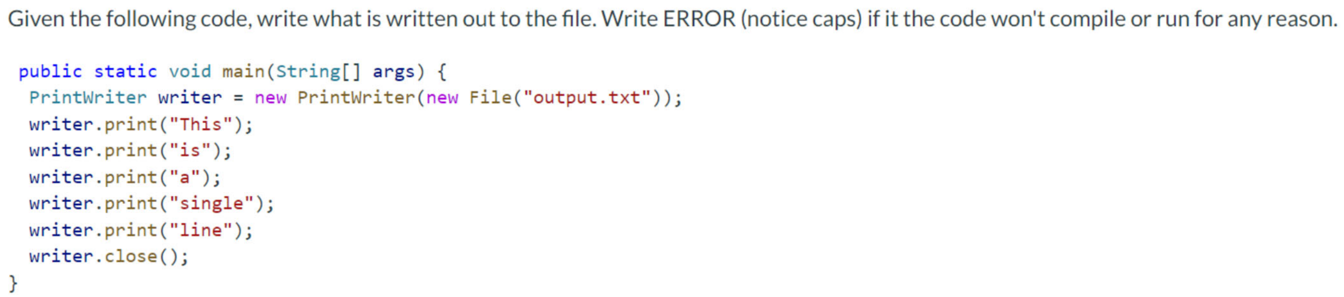
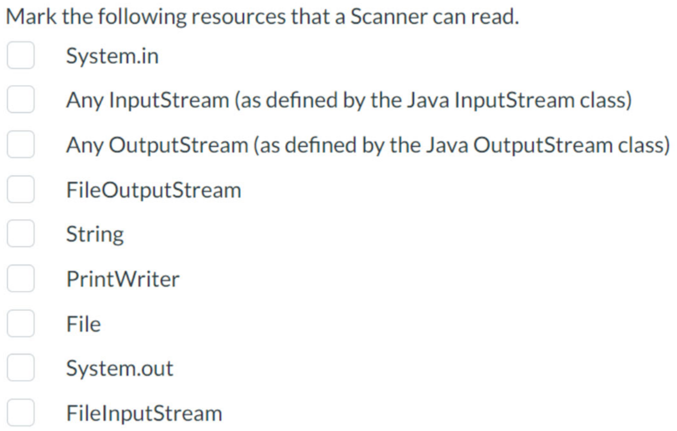
CS163/164 – Review Worksheet Name___________________________________



Given the following code, write what is written out to the file. Write ERROR (notice caps) if it the code won't compile or run for any reason.

```
 public static void main(String[] args) {
  PrintWriter writer = new PrintWriter(new File("output.txt"));
  writer.print("This");
  writer.print("is");
  writer.print("a");
  writer.print("single");
  writer.print("line");
  writer.close();
}
```



Mark the following resources that a Scanner can read.

□ System.in

□ Any InputStream (as defined by the Java InputStream class)

□ Any OutputStream (as defined by the Java OutputStream class)

□ FileOutputStream

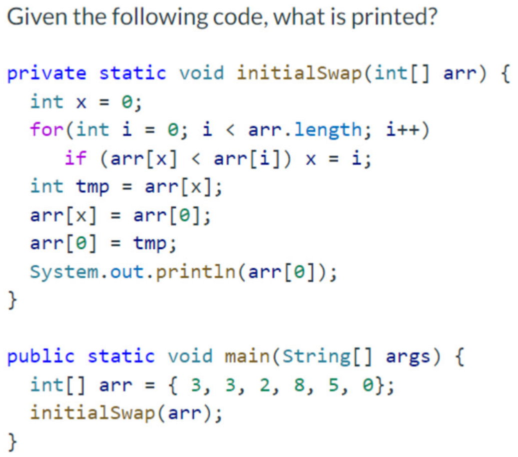
□ String

□ PrintWriter

□ File

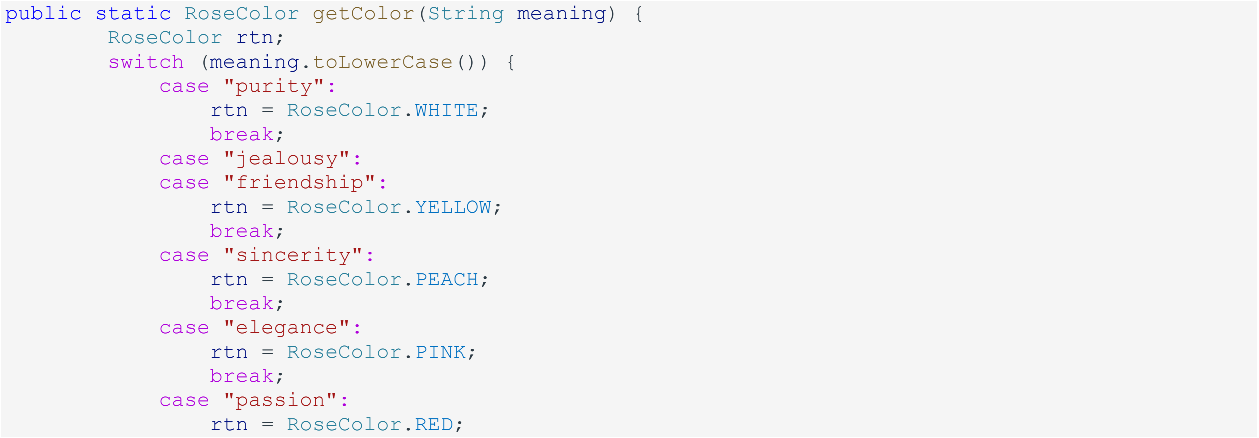
□ System.out

□ FileInputStream

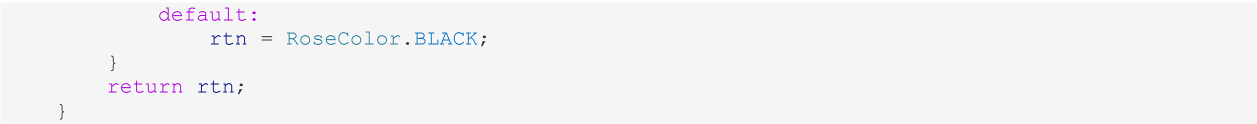


Given the following code, what is printed?

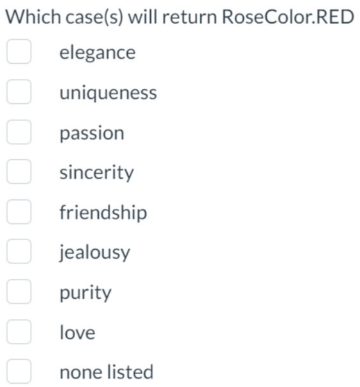
```
private static void initialSwap(int[] arr) {
  int x = 0;
  for(int i = 0; i < arr.length; i++)
     if (arr[x] < arr[i]) x = i;
  int tmp = arr[x];
  arr[x] = arr[0];
  arr[0] = tmp;
  System.out.println(arr[0]);
}

public static void main(String[] args) {
  int[] arr = { 3, 3, 2, 8, 5, 0};
  initialSwap(arr);
}
```



```
public static RoseColor getColor(String meaning) {
        RoseColor rtn;
        switch (meaning.toLowerCase()) {
            case "purity":
                rtn = RoseColor.WHITE;
                break;
            case "jealousy":
            case "friendship":
                rtn = RoseColor.YELLOW;
                break;
            case "sincerity":
                rtn = RoseColor.PEACH;
                break;
            case "elegance":
                rtn = RoseColor.PINK;
                break;
            case "passion":
                rtn = RoseColor.RED;
```

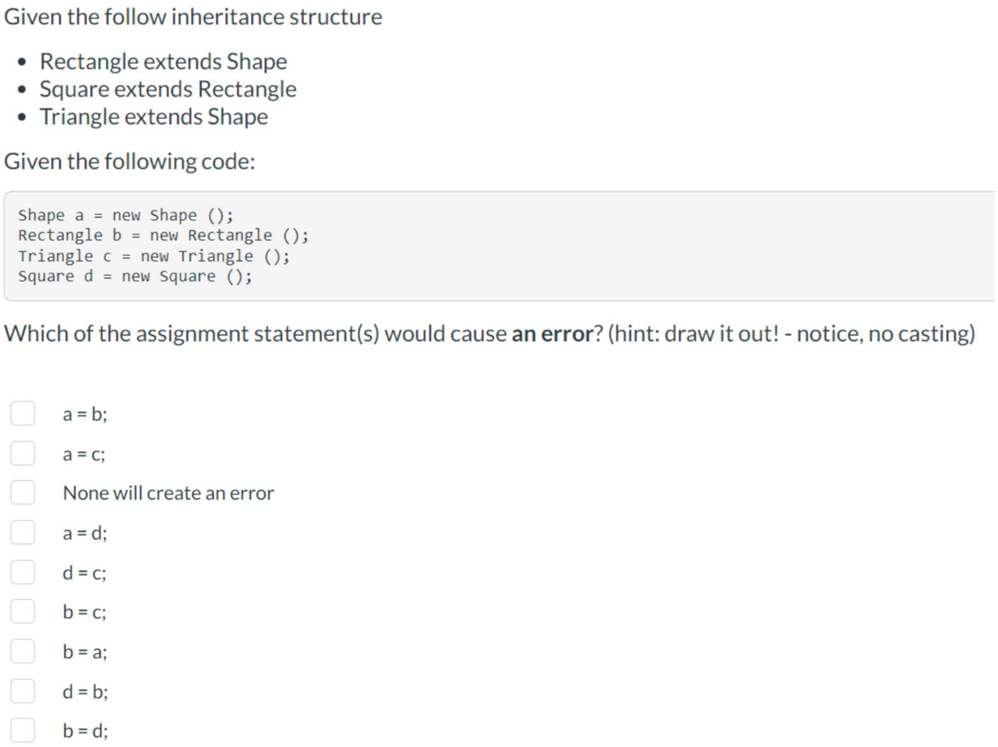


```
            default:
                rtn = RoseColor.BLACK;
        }
        return rtn;
    }
```



Which case(s) will return RoseColor.RED

- □ elegance
- □ uniqueness
- □ passion
- □ sincerity
- □ friendship
- □ jealousy
- □ purity
- □ love
- □ none listed



Given the follow inheritance structure

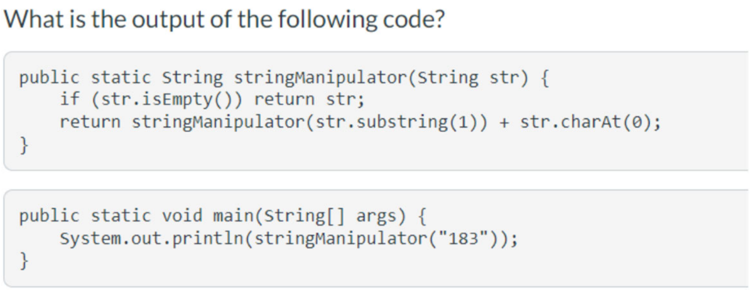
- Rectangle extends Shape
- Square extends Rectangle
- Triangle extends Shape

Given the following code:

```
Shape a = new Shape ();
Rectangle b = new Rectangle ();
Triangle c = new Triangle ();
Square d = new Square ();
```

Which of the assignment statement(s) would cause **an error**? (hint: draw it out! - notice, no casting)

- □ a = b;
- □ a = c;
- □ None will create an error
- □ a = d;
- □ d = c;
- □ b = c;
- □ b = a;
- □ d = b;
- □ b = d;

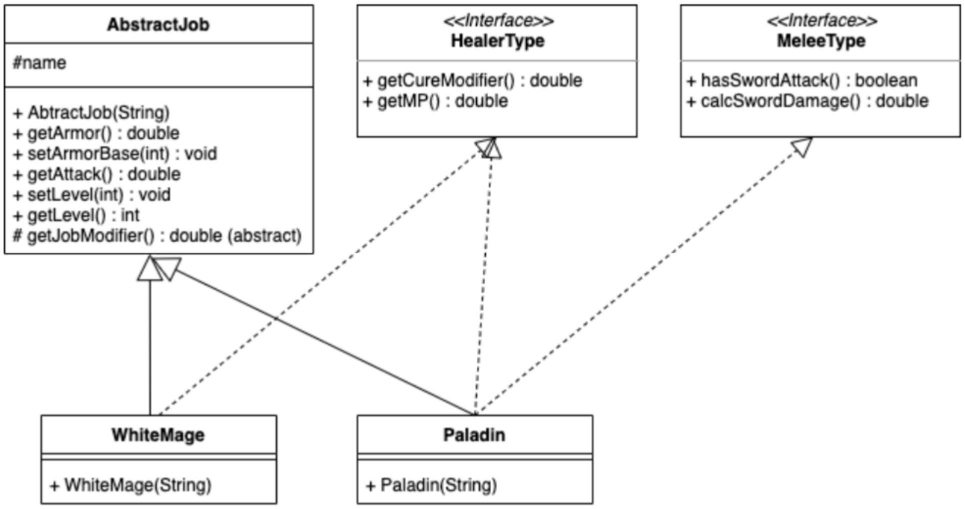


What is the output of the following code?

```
public static String stringManipulator(String str) {
    if (str.isEmpty()) return str;
    return stringManipulator(str.substring(1)) + str.charAt(0);
}
```

```
public static void main(String[] args) {
    System.out.println(stringManipulator("183"));
}
```

Given the following UML design, which methods are ***required*** to be implemented in WhiteMage before the program will compile. Select all that are possible.



□ getAttack() : double

□ getMP() : double

□ getLevel() : int

□ calcSwordDamage() : double

□ getCureModifier() : double

□ getJobModifier() : double

□ hasSwordAttack() : boolean

□ a unique constructor

□ setLevel(int) : void

□ getArmor() : double

□ setArmorBase(int) : void