

String & Errors

Name _____

Answer each of the following clearly, correctly, and completely.

1. What are the values of the following expressions? In each line, assume that

```
String s = "Hello";
```

```
String t = "World";
```

a) `s.length() + t.length()`

b) `s.substring(1,2)`

c) `s.substring(s.length()/2, s.length())`

d) `s + t`

e) `t.concat(s)`

2. Find at least five *compile-time* errors in the following program.

```
public class HasErrors {
```

```
    public static void main() {
```

```
        System.out.print(Please enter two numbers:)
```

```
        x = in.nextDouble();
```

```
        y = in.nextDouble();
```

```
        System.out.println("The sum is " + x + y);
```

```
    }
```

```
}
```

3. Find three *run-time* errors in the following program.

```
public class HasErrors {  
    public static void main(String[] args) {  
        int x = 0;  
        int y = 0;  
        Scanner in = new Scanner("System.in");  
        System.out.print("Please enter an integer: ");  
        x = in.readInt();  
        System.out.print("Please enter another integer: ");  
        x = in.readInt();  
        System.out.println("The sum is " + x + y);  
    }  
}
```

4. Explain the difference between 2, 2.0, '2', "2", and "2.0".

5. Explain what each of the following program segments computes.

a) $x = 2;$
 $y = x + x;$

b) $s = "2";$
 $t = s + s;$