**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”;

* 1. s.length() + t.length()
  2. s.substring(1,2)
  3. s.substring(s.length()/2, s.length())
  4. s + t
  5. t.concat(s)

1. 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.printline("The sum is " + x + y);

}

}

1. 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);

}

}

1. Explain the difference between 2, 2.0, ‘2’, “2”, and “2.0”.
2. Explain what each of the following program segments computes.
   1. x = 2;

y = x + x;

* 1. s = “2”;

t = s + s;