

Software Design I (CS 120)
Quiz 08: Monday, 16 April 2018

NAME _____

(1) (15 points) The class below uses a supplier class called `ArrayWorker`. For the code to work, that supplier class must have the following methods:

- A **constructor** that takes in an array of `String` data as input, and saves a reference to it, so that it can be used by the class methods later on.
- A method called `printLongest()` that prints the words “Longest String in”, followed by the contents of the array, followed by a colon and the length of the longest `String` in the array (for an empty array, this will be 0). Array elements should appear on the same line, with a single space on each side of each element, and with brackets [...] at each end of the data. The method should print a line-break after each line of output.

Thus, when the `main()` method below executes, we will see output as follows:

```
input1: Longest String in [ This is a test ]: 4
input2: Longest String in [ This is another test ]: 7
input3: Longest String in [ ]: 0
```

On the next page, write the code for the supplier class so that these methods will work properly.

```
public class Main
{
    public static void main( String[] args )
    {
        String[] input1 = { "This", "is", "a", "test" };
        ArrayWorker worker = new ArrayWorker( input1 );
        System.out.print( "input1: " );
        worker.printLongest();

        String[] input2 = { "This", "is", "another", "test" };
        worker = new ArrayWorker( input2 );
        System.out.print( "input2: " );
        worker.printLongest();

        String[] input3 = {}; // empty array
        worker = new ArrayWorker( input3 );
        System.out.print( "input3: " );
        worker.printLongest();
    }
}
```

```
// Write the supplier class here.
```