

# Solution to Homework #1— High Performance Scientific Computing

September 12, 2019

**Problem 1** (*100 points*) Learning to use Git.

*Solution:* Write your solution here. If there were, math it could look like

$$\begin{aligned}\sin A \cos B &= \frac{1}{2} [\sin(A - B) + \sin(A + B)] \\ \sin A \sin B &= \frac{1}{2} [\sin(A - B) - \sin(A + B)] \\ \cos A \cos B &= \frac{1}{2} [\cos(A - B) + \cos(A + B)]\end{aligned}$$

If you need to include a block of code:

```
// Some interesting code here
int a = 0;
int b = 1;
```

**Program 1:** The caption should briefly describe what's so important about this code block.

If the code had output, we could include it like so:

```
[ 0.0156615  0.00483956  0.00490249  0.00701772  0.0049713  0.00542965
 0.00486095  0.00420872  0.02011727]
```

The supercomputer Blue Waters (Fig. 1) has hundreds of thousands of CPUs:



**Figure 1:** This is how to include a figure.