

## Exercise: Debugging Parallel Codes

1. Log into the Linux cluster supercomputer (`sooner.oscer.ou.edu`).

2. Confirm that you're in your home directory:

```
pwd  
/home/yourusername
```

3. Check that you have a `NCSIPARII2011_exercises` subdirectory inside your home directory:

```
ls  
NCSIPARII2011_exercises
```

4. Copy the `Errors` directory into your `NCSIPARII2011_exercises` directory:

```
cp -r ~amweeden/NCSIPARII2011_exercises/Errors \  
~/NCSIPARII2011_exercises
```

5. Go into your `NCSIPARII2011_exercises` subdirectory:

```
cd NCSIPARII2011_exercises
```

6. Confirm that you're in your `NCSIPARII2011_exercises` subdirectory:

```
pwd  
/home/yourusername/NCSIPARII2011_exercises/
```

7. See what files or subdirectories (if any) are in the current working directory:

```
ls
```

8. Go into your `Errors` subdirectory:

```
cd Errors
```

9. Confirm that you're in the `NCSIPARII2011_exercises` subdirectory:

```
pwd  
/home/yourusername/NCSIPARII2011_exercises/Errors
```

10. See what files or subdirectories (if any) are in the current working directory:

```
ls
```

11. Edit the batch script `errors.bsub` to use your username and e-mail address.

12. The files `errors.c` is a (intentionally) buggy hybrid code. Your task in this assignment is to fix as many of the bugs as you can.

- Use the tips we taught during the debugging lecture.

- To build the code, use the **make** command (see the `Makefile` for available arguments to **make**).

- To run, use the **bsub < errors.bsub** command.
- Make sure to examine the outputs of the stdout and stderr .txt files to help you debug.