## Accessing SCC

You exercise will be done by using the Shared Computer Cluster (SCC) at the Massachusetts Green High Performance Computer Center ( MGHPCC). The MGHPCC operates as a joint venture between Boston University, Harvard University, the Massachusetts Institute of Technology, Northeastern University, and the University of Massachusetts. http://www.mghpcc.org

To access `scc`, open a terminal and run:

```
ssh ~[username]@scc1.bu.edu
```

My default shell on `scc` isn't bash, so I normally run the command `bash` to switch over to a bash shell. Before running `bash`, the command prompt looks like:

```
scc1:~ %
```

On the other hand, the default bash command prompt includes your username:

```
[username]@scc1 \textasciitilde]
```

Good! Next, let's navigate to our project's active directory.

```
cd /projectnb/alg504/
```

You must create your own directory with your kerberos username. If you'd like to play around with compiling and running code, you can log into an interactive shell by running:

```
qrsh -l h_rt=1:00:00 -P alg504
```

That'll give you a one core interactive shell for one hour. Of course, it should be pretty clear how to try to get it for longer than an hour... but keep in mind, a longer interactive shell may not be available! There's a wonderful collection of information on BU's IS&T website for running jobs on SCC, if you're interested: `http://www.bu.edu/tech/support/research/system-usage/running-jobs/`

### 0.1 Hello World

Let's start with a simple hello world code!

```
#include <stdio.h>

int main(int argc, char** argv)
{
   printf("Hello world!\n");
   return 0;
}
```

Let's say we saved this to a file `hello.c`. It could be compiled by:

```
g++ hello.c -o hello
```

Okay, good, we did the obvious.