How to run OpenMP programs

Login

You need your WSUID and password (myWSU/Canvas/etc.).

Open a terminal (if you are using Windows, use something like powershell, or putty) and type the following command:

`ssh WSUID@pleiades.tricity.wsu.edu`

and enter the password.

Allocating a node

After executing the ssh command, you will be logged in on the head node. We should not run anything on the head node. To allocate a new node type the following command:

`salloc`

After this command is executed, you will logged in to one of the client nodes. In case there are no nodes available, you have to wait till the system allocates you a node.

Compiling and running

Once the node is allocated, you can use vim as an editor and write your program. A sample program is attached. To compile the program, use gcc with –fopenmp flag. A sample command is given below:

`gcc hello.c –fopenmp –o myprogram`

To run the code, run the executable. For example:

`./myprogram`

Note 1: You can use winscp, filezilla, etc, to copy files from your local computer to pleiades. This is helpful if you like to edit the programs on your local computer than using vim on the server. Since the filesystem is the same across all nodes, you just need to copy the files to head node.

Note 2: If you face any issues email me at a.sukumaranrajam@wsu.edu with screen shots

Note 3: Make sure that you use "–fopenmp" flag when you compile the code.