**Child Process Exercise**

Implement a command line application which will perform directory listing on the current directory.

The command line application will receive the following parameters:

* An action that will be the word “list”
* The following options :
  + –owner – will display the file owner
  + –permissions - display all file permissions
  + –sub – display all files in the sub directories
  + –onlyDir – only directories in the current directory, without the content

For the listing itself, use the operating system commands.

Examples for valid commands:

cli-app list –owner

cli-app list –permissions

cli-app list –owner –onlyDir

**Cluster Module Exercise:**

Implement a beer store.

Create a simple express server that will provide a rest API for the entity Beer.

Beer will have the following field :

Name : string

Type : String – Can have only the values black or white.

Quantity : Number

Make this server work with the cluster module.

One of the problems with the cluster module is how different processes work with the same resources. For Example, logging is different with the cluster module, since all the processes can’t write simultaneously to the same file. Handle this problem in your server and make sure that all the processes perform logging.

Measure the load that you succeed to get with the cluster module :

Run JMeter with your server in 2 scenarios :

Server does not work with the cluster module

Server does work with the cluster module.

See the differences in the load that your server can handle.