# Problem 3 (10 Points)

Select a node on the Explorer Cluster and report the following information about that node: (please do not ask the system admins for this information)

   a. The CPU model    b. The cache memory hierarchy, including the size and associativity.
   c. The main memory size of this node.    d. The version of Linux installed.

*Answers to this question should be included in your homework 1 write-up in pdf format.

*Obtaining Node **c0745** on the Explorer Cluster*

## Part (a)

**Node CPU Model:** Intel(R) Xeon(R) CPU E5-2680 v4 @ 2.40GHz

*lscpu | grep "Model name"*

## Part (b)

*Node cache memory hierarchy*

**Caches:** - L1d: - Size: 896 KiB (28 instances) - Associativity: 8-way set associative - L1i: - Size: 896 KiB (28 instances) - Associativity: 8-way set associative - L2: - Size: 7 MiB (28 instances) - Associativity: 8-way set associative - L3: - Size: 70 MiB (2 instance) - Associativity: 20-way set associative

*lscpu -C*

## Part (c)

**Node Main Memory Size:** 251 GiB (263358456 bytes)

*free and free -h*

## Part (d)

**Node Linux Kernel Version:** Rocky Linux 9.3 (Blue Onyx)

*cat /etc/os-release*