

CS347(M) - Assignment 1  
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## CPU

(Information obtained by seeing file ``cat /proc/cpuinfo``)

1. The machine has 2 CPU cores. ``cat /proc/cpuinfo | grep "cpu cores"``
2. The frequency of the CPU is 1700 MHz. ``cat /proc/cpuinfo | grep "MHz"``

## Memory

(Information obtained by seeing file ``cat /proc/meminfo``)

1. The machine has a total of 3950104 kB. ``cat /proc/meminfo | grep "MemTotal"`` (There is also a swap memory of size 9764860 kB)
2. Memory is divided into **used**, **free** and used has special partitions named **shared**, **cached** and **buffer**. ``cat /proc/meminfo``

**Buffers** are associated with a specific block device, and cover caching of filesystem metadata as well as tracking in-flight pages. The **cache** only contains parked file data. That is, the **buffers** remember what's in directories, what file permissions are, and keep track of what memory is being written from or read to for a particular block device. The **cache** only contains the contents of the files themselves. ([ref](#)). **shared** memory is memory that may be simultaneously accessed by multiple programs with an intent to provide communication among them or avoid redundant copies.

## Process Centric

1. 5108 voluntary, 3 involuntary ``cat /proc/2/status | grep "ctxt_switches"``
2. 213316 kB is free. ``cat /proc/meminfo | grep "MemFree"``