# CS 241 Section (03/29/2012)

# DS8 Outline

- MP6 Recap
- Common questions
- Conditional Variable
- Usage of access()
- Code examples

# MP6

**job1: job2 job3**
        **commandtoberun withargs**
        **commandtoberun2 withargs**
**job2:**
      **othercommand**
**job3:**
      **finalcommand**

# MP6

```
job1:  job2 job3
       commandtoberun withargs
       commandtoberun2 withargs
job2:
       othercommand
job3:
       finalcommand
```

# MP6

**job1:** **job2** **job3**

**commandtoberun withargs**
**commandtoberun2 withargs**

**job2:**

**othercommand**

**job3:**

**finalcommand**

# MP6

| job1: | job2 | job3 |
| --- | --- | --- |

commandtoberun withargs
commandtoberun2 withargs

job2:

othercommand

job3:

finalcommand

**commands**

# MP6

- Part I
  - Parse the command line
- Part II
  - Parse the makefile
- Part III
  - Check the dependencies
- Part IV
  - Do the job

# Common Questions

- How should I use parser_parse_makefile() ?
- Why the contents of the queue are not right though I append the new job/dependency/target at the end?
- Why my semaphore is not working as I expected?

# Conditional Variables

- Represent an arbitrary event
- Operations: Wait for event, signal occurrence of event
- Tied to a mutex for mutual exclusion

# Conditional Variables

- Basic operations
  - Wait for event
  - Signal occurrence of event to one waiting thread
  - Signal occurrence of event to all waiting threads

# Use of access()

- Basic operations
  - int access(const char *pathname, int mode);
- Mode:
  - F_OK

# Coding Examples

- This week:
  **ds/ds8/**