1. Modify the kernel to add an idle task. **(40%)**

[upload a standalone tarball named as p1-4a-1.tar.gz]

What should be executed in the body of the idle task? **(40%)**

1. Add WAIT state to tasks.

[upload a standalone tarball named as p1-4a-2.tar.gz] **(40%)**

Briefly describe in one paragraph: How are we going to bookkeep tasks in WAIT state? **(5%)**

Briefly describe in one paragraph: How would you demonstrate that your implementation is correct? **(5%)**