**/\* A Parent Waiting for Its Child using semaphores. sem-join-works.c \*/**

**#include <stdio.h>**

**#include <unistd.h>**

**#include <pthread.h>**

**#include <semaphore.h>**

**sem\_t done;**

**void \***

**child(void \*arg) {**

**sleep(5);**

**printf("child\n");**

**sem\_post(&done);**

**return NULL;**

**}**

**int**

**main(int argc, char \*argv[]) {**

**pthread\_t p;**

**printf("parent: begin\n");**

**sem\_init(&done,0, 0);**

**pthread\_create(&p, NULL, child, NULL);**

**sem\_wait(&done);**

**printf("parent: end\n");**

**return 0;**

**}**

**/\***

**vishnu@mannava:~/threads$ man 3 sem\_init**

**vishnu@mannava:~/threads$ cc sem-join-works.c -lpthread**

**vishnu@mannava:~/threads$ ./a.out**

**parent: begin**

**child**

**parent: end**

**\*/**