POSIX Thread API

- Create a new thread, run fn with arg

```
tid thread_create (void (*fn) (void *), void *);
```

  - Allocate Thread Control Block (TCB)
  - Allocate stack
  - Put func, args on stack
  - Put thread on ready list

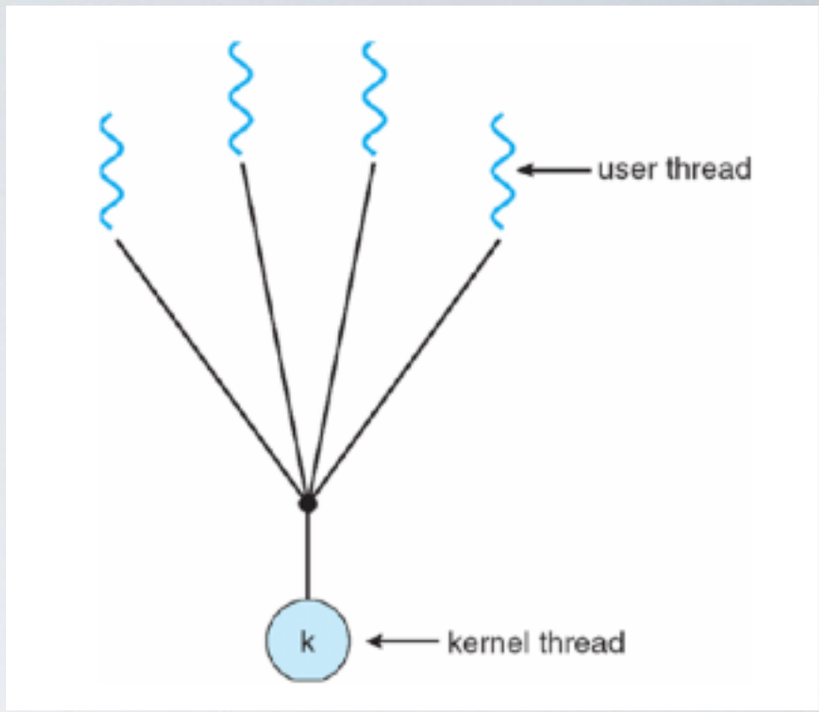
- Destroy current thread

```
void thread_exit ();
```

- Wait for thread to exit

```
void thread_join (tid thread);
```

Many-to-one model
User-level threads
(a.k.a green threads)



One kernel thread per process
thread management and scheduling is delegated to a library

- e.g pthreads `PTHREAD_SCOPE_PROCESS`
- e.g Java threads

➡ The kernel is not involved

✓ Very lightweight and fast

✓ All threads can be blocked if one of them is waiting or an event

✓ Cannot be scheduled on multiple cores