

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

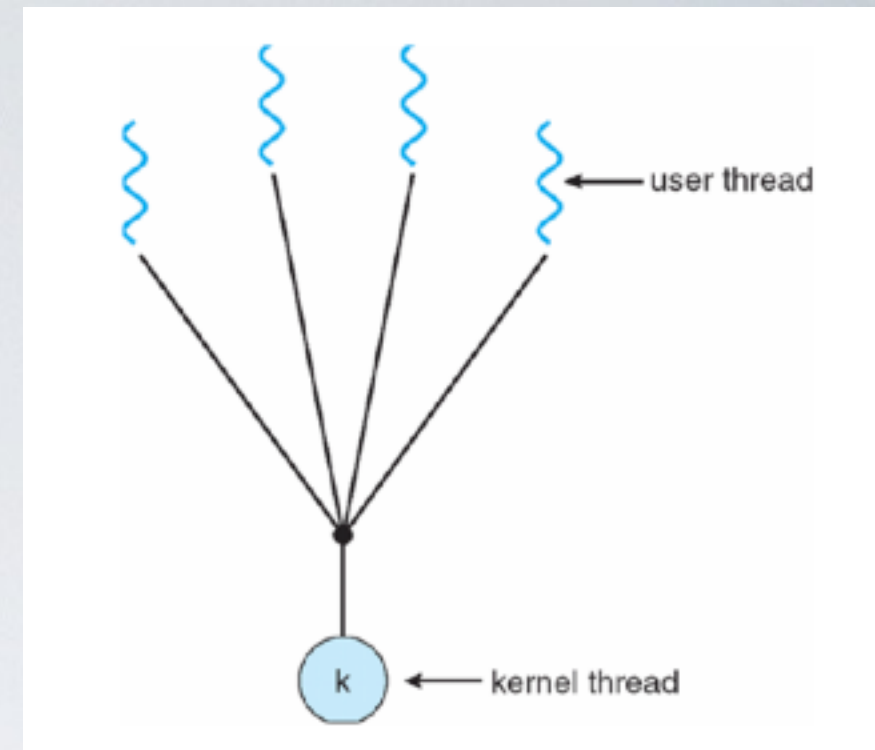
```
void thread_exit ();
```

- Wait for thread 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 on an event
- ✓ Cannot be scheduled on multiple cores