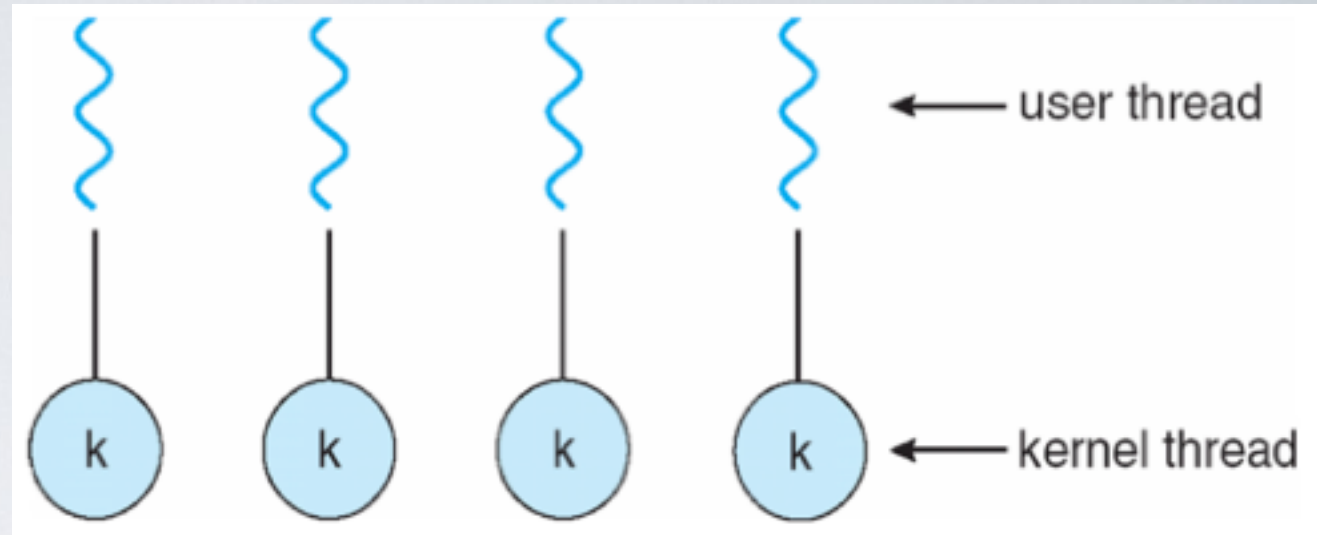


# One-to-one model

## Kernel-level threads (a.k.a native threads)



The kernel manage and schedule threads

- e.g Windows threads
- e.g POSIX pthreads `PTHREAD_SCOPE_SYSTEM`
- e.g (new) Solaris lightweight processes (LWP)

➡ All thread operations are managed by the kernel

✓ good for scheduling

✓ bad for speed

# 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);
```