

Thread Pools in Java

Thread Pools

- Creating and destroying threads costs
 - ❖ Variable allocation
 - ❖ Garbage collection
- Threads aren't specific until `run ()` is called
- Can therefore reuse threads

Thread Pools



Thread Pools

- Threads are created
- Wait until they are given tasks
- Once finished, return to thread pool

Making Thread Pools

```
ThreadPoolExecutor tpe =  
    new ThreadPoolExecutor(  
        minSize, maxSize,  
        waitTime, TimeUnit.MILLISECONDS,  
        new LinkedBlockingQueue());
```

Making Thread Pools

```
Task [ ] tasks = new Task [ nTasks ] ;  
    for ( int i = 0; i < nTasks ; i++) {  
        tasks [ i ] = new Task (...) ;  
        tpe.execute ( tasks [ i ] ) ;  
    }  
tpe.shutdown ( )
```