

thread t0

thread t1

thread entry (0)

```
L1: nthread = atoi(argv[1])
L2:   size = atoi(argv[2])
L3:       assert(...)
L4:true       i<nthread
L5:   pthread_create(...) (1)
L4:false      i<nthread
L6:       worker(NULL)
L10:  data = malloc(...)
L11:  read(..., data, ...)
L12:true      i<size/nthread
L13:  data[i] = ...
L12:false     i<size/nthread
L14:  pthread_mutex_lock(...) (3)
L15:  result += ...
L16:  pthread_mutex_unlock(...) (4)
```

(2)thread entry

```
data = malloc(...) :L10
read(..., data, ...) :L11
i<size/nthread      true:L12
data[i] = ... :L13
i<size/nthread      false:L12
(5)pthread_mutex_lock(...) :L14
/ result += ... :L15
(6)pthread_mutex_unlock(...) :L16
```

(7)thread exit

```
L7:false  atoi(argv[3])==1
L9:  printf(..., result)
      thread exit (8)
```