

```
#pragma omp parallel
{
```

code 1

code 1 code 1 code 1 code 1

```
#pragma omp for
for(...)
    iterations
```

iterations

```
#pragma omp sections
{
    #pragma omp section
    code 2
    #pragma omp section
    code 3
}
```

code 2 code 3

```
#pragma omp master
code 4
```

code 4

code 5

code 5 code 5 code 5 code 5

```
#pragma omp barrier
code 6
```

code 6 code 6 code 6 code 6

```
#pragma omp critical
code 7
```

code 7 code 7 code 7 code 7

//Can not run simultaneously

```
private(a)
shared(a)
```

int a int a int a int a

```
reduction(+:a)
{}
```

int a
int a=0 int a=0 int a=0 int a=0
int a=sum(all a's)

Changing the number of threads:
Function Call: `omp_set_num_threads(2)`
Command line: `export OMP_NUM_THREADS=4`
Pragma directive: `num_threads(8)`

Compiling:
`gcc main.c -fopenmp`
Number of cores:
`cat /proc/cpuinfo`

Shorthand (syntactic sugar):
`#pragma omp parallel for`
`#pragma omp parallel sections`