

```
//
// Demo program -- A parallel region is a run-time concept, not
//                 a purely compile-time concept.
//
```

```
#include <stdio.h>
#include <omp.h>
```

```
/* ----- */
```

```
void f( int n )
{
    int i, id ;

    id = omp_get_thread_num() ;
#pragma omp for
    for ( i = 0 ; i < n ; i++ ) {
        printf("( %d ): i = %d\n", id, i ) ;
    }
}
```

```
/* ----- */
```

```
int main()
{
    int n ;

    n = 12 ;

#pragma omp parallel firstprivate(n)
{
#pragma omp master
{
    printf("main: n = %d\n", n ) ;
}
    f(n) ;
} /* End parallel section. */

} /* End main. */
```

```
===== Sample Session with Three Threads =====
```

```
cosmos%
cosmos% setenv OMP_NUM_THREADS 3
cosmos%
cosmos% gcc -fopenmp p3.c
cosmos% a.out
(2): i = 8
(2): i = 9
(2): i = 10
(2): i = 11
main: n = 12
(0): i = 0
(1): i = 4
(1): i = 5
(1): i = 6
(1): i = 7
(0): i = 1
(0): i = 2
(0): i = 3
```