

PDC - Lab 1

Aadhitya Swarnesh I



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Code :

```
#include <stdio.h>
#include <omp.h>
int main()
{
    int cursum, total,n;
    int a[10]={1,2,3,4,5,1,2,3,4,5};
    n = sizeof(a)/sizeof(int);

    #pragma omp parallel private(cursum) shared(total)
    {
        cursum = 0;
        total = 0;
        #pragma omp for
        for(int i = 0; i <= n; i++)
        {
            cursum += a[i];
        }

        #pragma omp critical
        {
            total += cursum;
        }
    }
    printf("Total Sum: %d\n", total);
    return 0;
```

}

Output :

```
(base) Aadhityas-MacBook-Air:18Jul2020 aadhitya$ gcc-10 -fopenmp p2.c
(base) Aadhityas-MacBook-Air:18Jul2020 aadhitya$ ./a.out
Total Sum: 30
(base) Aadhityas-MacBook-Air:18Jul2020 aadhitya$ █
```