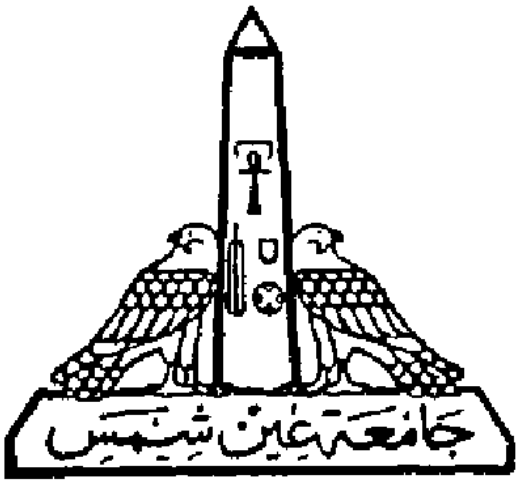


# High-Performance Computing
# CSE415
# Lab 3

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**Group: SR1-CESS**

# Code:-

```
//gcc -fopenmp vectorDotProduct.c
//./a.out
#include <omp.h>
#include <stdio.h>
#define N 8
#define noThreads 4
int main()
{
	float  x[8] = {0,1,2,3,4,5,6,7};
	float  y[8] = {0,2,4,6,8,10,12,14};
	float ans = 0;
	omp_set_num_threads(noThreads);
	#pragma omp parallel
	{
	  int id = omp_get_thread_num();


	  #pragma omp for
	  for(int i = 0; i < N; i++)
	  {
	    printf("Partial result by thread[%d]= %f \n",id,x[i]*y[i]);
	     ans += x[i]*y[i];
	  }
	#pragma omp single
	printf("Final result= %f \n",ans);
	}
return 0;
}
```