```
#include<stdio.h>
#include<stdlib.h>
#include<sys/time.h>
#include<omp.h>

int min(int,int);
int main()
{
    int n,k,i,j,c[10][10];
    int tid;
    omp_set_num_threads(0);
    {
        tid=omp_get_thread_num();
        printf("Enter the number of nodes:");
        scanf("%d",&n);
        printf("Enter the cost matrix:\n");
        for(i=0;i<n;i++)
        for(j=0;j<n;j++)
              scanf("%d",&c[i][j]);
        for(k=0;k<n;k++)
        {
                for(i=0;i<n;i++)
                for(j=0;j<n;j++)
                        c[i][j]=min(c[i][j],c[i][k]+c[k][j]);
        }
        printf("\n All pairs shortest path\n");
        for(i=0;i<n;i++)
        {
               for(j=0;j<n;j++)
            printf("%d\t",c[i][j]);
               printf("\n");
        }
    }
    return 0;
}

int min(int a,int b)

{

  return(a<b?a:b);

}
```

OUTPUT:

```
Enter the number of nodes:3

Enter the cost matrix:

5 6 7

8 9 1
```

2 3 4

All pairs shortest path

5 6 7

3 4 1

2 3 4