

```

1  #include <iostream>
2  #define TAM 4
3
4  using namespace std;
5
6  float AlgoritmoMediaClasico(int m[][TAM], int n, int pf, int uf, int pc, int uc){
7
8      int i,j,s=0;
9
10     for(i=pf;i<=uf;i++)
11         for (j=pc;j<=uc;j++)
12             s+=m[i][j];
13     return (float) s/(n*n);
14 }
15
16 float MediaMatdyv(int m[][TAM], int n, int pf, int uf, int pc, int uc){
17
18     if (n==2)
19         return AlgoritmoMediaClasico(m, n, pf, uf, pc, uc);
20     else{
21         float m1=MediaMatdyv(m, n/2, 0, (n/2)-1, 0, (n/2)-1);
22         float m2=MediaMatdyv(m, n/2, n/2, n-1, 0, (n/2)-1);
23         float m3=MediaMatdyv(m, n/2, 0, (n/2)-1, n/2, n-1);
24         float m4=MediaMatdyv(m, n/2, n/2, n-1, n/2, n-1);
25         //cout << m1 << ", "<< m2 << ", "<< m3 << ", "<< m3 << endl;
26         return (m1+m2+m3+m4)/4;
27     }
28 }
29
30
31 int main(){
32
33     int m[][4]={ {1,2,3,4},{1,2,3,4},{1,2,3,4},{1,2,3,4}};
34
35
36     float res=MediaMatdyv(m,4,0,3,0,3);
37
38     cout << "Media DyV: " << res << endl;
39
40     return 0;
41
42 }

```