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#include<iostream.h>
int max(int x, int y);
void readfile();
void findpath();
void result();
int f[1000][1000];
int a[1000][1000],n;
int main()
{
    readfile();
    findpath();
    result();
    return 0;
}

void readfile()
{
    FILE *fi;
    fi=fopen("triangle.inp","rt");
    fscanf(fi,"%d",&n);
    for (int i=1;i<=n;i++)
        for (int j=1;j<=i;j++)
            fscanf(fi,"%d",&a[i][j]);
    fclose(fi);
}

int max(int x, int y)
{
    if (x>y) return x;
    return y;
}

void findpath()
{
    f[1][1]=a[1][1];
    for (int i=2;i<=n;i++)
        f[i][1]=f[i-1][1]+a[i][1];
    for (int i=2;i<=n;i++)
        for (int j=2;j<=i;j++)
            f[i][j]=max(f[i-1][j-1],f[i-1][j])+a[i][j];
}

void result()
{
    int m=INT_MIN;
    for (int i=1;i<=n;i++)
        if (f[n][i]>m)
            m=f[n][i];
    cout<<m<<endl;
}
/*

```

triangle.inp

5

7

3 8

8 1 0

2 7 4 4

4 5 2 6 5

*/