EDITORIAL - THE PARADE

Let us find the the maximum length required to cover all points along the x-axis, and denote it by Ox=maximum xi-minimum xi. Similarly Oy = maximum yi-minimum yi. Now because the area has to be square, we'd find which one out of Ox and Oy is maximum.

```cpp
#include <iostream>
#include<algorithm>
using namespace std;

int main()
{
        int n;
        cin>>n;
        long long a[n],b[n],i,x,y;
        for(i=0;i<n;i++)
        {
                cin>>a[i]>>b[i];
        }
        sort(a,a+n);
        sort(b,b+n);
        x=a[n-1]-a[0];
        y=b[n-1]-b[0];
        if(x>y)
        cout<<x*x;
        else
        cout<<y*y;
        return 0;
}
```