

```
#include <iostream>
#include <cmath>
```

```
using namespace std;
```

```
int mcm(int a, int b){
    while(b!=0){
        int temp = b;
        b = a%b;
        a = temp;
    }
    return a;
}
```

```
int main(){
    int k;
    cout<<"Ingrese la cota superior: ";
    cin>>k;

    cout<<"Valores que funcionan"<<endl;

    for(int x=1; x<k; x++){
        for(int y=x+1; y<k; y++){
            int suma_cuadrados = x*x + y*y;
            int raiz = sqrt(suma_cuadrados);
            if(raiz*raiz == suma_cuadrados && raiz<k && mcm(x,mcm(y,raiz)) == 1){
                cout<<"El valor de x: "<<x<<endl;
                cout<<"El valor de y: "<<y<<endl;
                cout<<"El valor de z: "<<raiz<<endl;
                cout<<"-----"<<endl;
            }
        }
    }

    return 0;
}
```

$$x, y, z < k$$

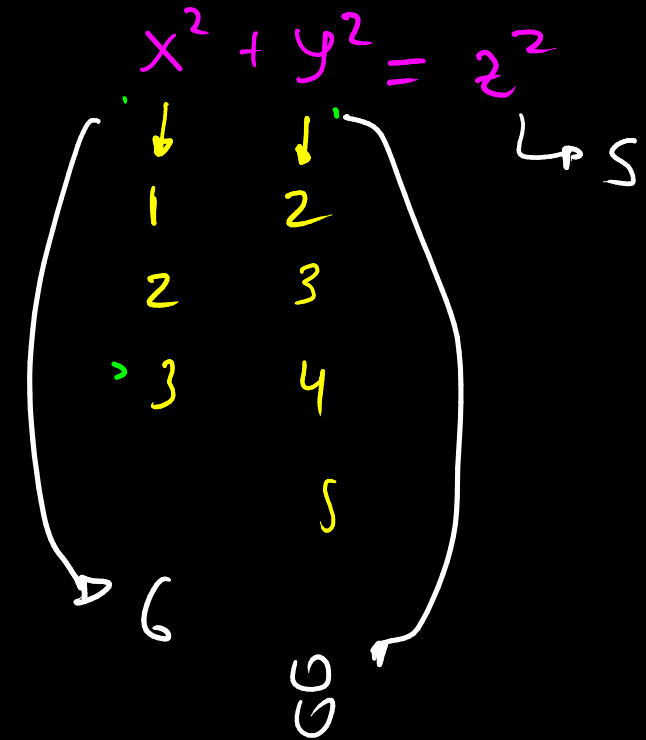
$$x^2 + y^2 = z^2$$

$$(x, y, z) \rightarrow (tx, ty, tz)$$

$$x < y$$

$$\text{mcm}(x, \text{mcm}(y, \text{raiz})) = 1$$

$$\text{mcm}(6, \text{mcm}(8, 10)) =$$



$$SC = 6 \cdot 6 + 8 \cdot 8 = 100$$

$$\text{raiz} = \sqrt{100} = 10$$

$$10 \times 10 = 100, 10 < 18,$$