Pythagorean

Solved: 51
Attempted: 53

General pythagorean formula is $a^2 + b^2 = c^2$. where a, b, c are positive integers. Find the a, b values when value of c^2 is given.

If given values cannot be used to make a triple, simply print -1 -1 otherwise print the value of a, b. Note that a, b should be sorted in ascending order.

Input Format

Value of c^2

Constraints

$0 < c^2 < 2000$

Output Format

sorted a, b or `-1 -1` as explained in problem statement

Sample Input 0

```
25
```

Sample Output 0

```
3 4
```

Explanation 0

$3^2 + 4^2 = 5^2$, this satisfies the equation.

Sample Input 1

```
36
```

Sample Output 1

```
-1 -1
```

Explanation 1

36 cannot be used to satisfy the equation

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C

```c
#include <stdio.h>
#include <math.h>
int main() {
    int c,csq,check=0;
    scanf("%d",&csq);
    if(csq<0 || csq>2000){
        printf("%d %d",-1,-1);
    }
    else{
        c = sqrt(csq);
        for (int a = 1; a < c; ++a) {
            for (int b = 1; b < c; ++b) {
                if(pow(a,2) + pow(b,2) == pow(c,2) && pow(c,2)==csq){
                    printf("%d %d",a,b);
                    check=1;
                    break;
                }
            }
            if(check==1)
                break;
        }
        if(check==0)
            printf("%d %d",-1,-1);
    }

    return 0;
}

```

Line: 1 Col: 1

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