

✓ Distribute pens and pencils to the girls equally.

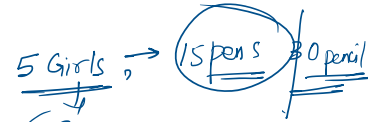
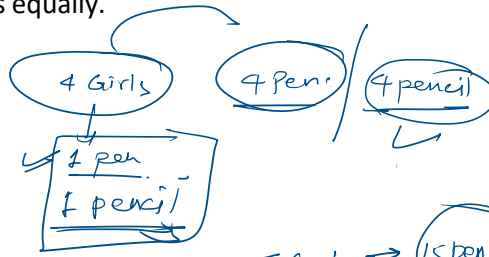
For example:

✓ 4 girls, 4 pens, 4 pencils

For each girl gets 1 pen, 1 pencils

✓ 5 girls 15 pens 30 pencils

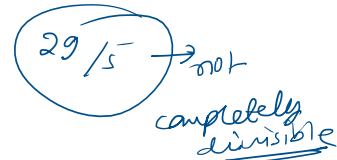
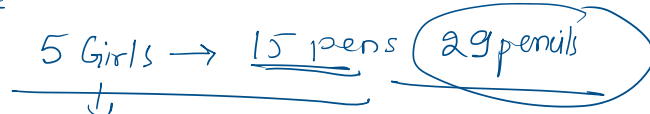
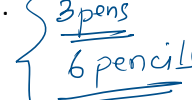
For each girl gets 3 pens, 6 pencils



✓ If equal distribution not possible then we have print "Can't".

✓ Output format:

{ 'Girl 1': { 'Pens': 1, 'pencils': 1 }, } → Girl 1 { pencils }



$$15/5 = 3 \quad \underline{3 \text{ pens}}$$

→ modulo operator (%)

↳ it will return the remainder

↳ remainder = 0 [completely divisible]
 ≠ 0 [not completely divisible]

✓ Find the sum of cubes of each number from lower limit to upper limit. [included]

Input :

25

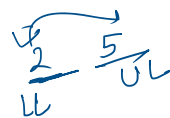
Output :

224

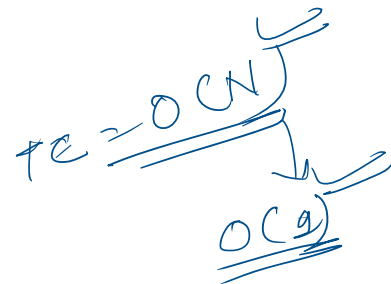
Explanation:

$2^3 + 3^3 + 4^3 + 5^3$

Constraints



$$2^3 + 3^3 + 4^3 + 5^3$$



✓

int sum = 0

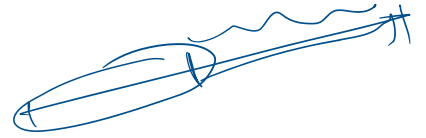
```
for(int i = LL; i <= UL; i++)
{
    sum += (i * i * i);
}
```

long

→ using Formula

Sum of cubes of N natural number
 Starting from 1 = $\left(\frac{n(n+1)}{2} \right)^2$

$$\frac{[3-7]}{3^3 + 4^3 + 5^3 + 6^3 + 7^3}$$



$$\frac{[1^3 - 7^3]}{1^3 + 2^3 + 3^3 + 4^3 + 5^3 + 6^3 + 7^3} = \left(\frac{7 \times (7+1)}{2} \right)^2$$

$$\frac{[1-2]}{1^3 + 2^3} = \left(\frac{2 \times (2+1)}{2} \right)^2$$

$$[a-b]^3 = \frac{[1-b]^3}{81} - \frac{[1-(a-1)]^3}{82} \quad b.$$

1