You are given a range [L, R] (inclusive), 1 ≤ L ≤ R ≤ 30. Let e be equal to the product of all the even numbers in this range, and o be the product of all the odd numbers. Findgcd(e, o).

**Example:**

evenoddgcd(1,6) = 3

Because:

* e = 2 \* 4 \* 6 = 48
* o = 1 \* 3 \* 5 = 15
* gcd(48, 15) = 3
* **[input] integer L**
  + Left side of range
* **[input] integer R**
  + Right side of range
* **[output] integer**
  + gcd of the product of even numbers and odd numbers between L and R

<https://codefights.com/challenge/fPyg8rww9C78CxTrC>

#include <iostream>

#include <stdio.h>

int evenoddgcd(int L, int R)

{

struct Helper{

long long int GCD( long long int a, long long int b)

{

if (a == 0) return b;

return GCD(b % a, a);

}

};

long long int e = 1, o = 1;

for (int i = L; i <= R; i++)

{

if (i % 2 == 0)

{

e \*= i;

}

else

{

o \*= i;

}

}

Helper h;

return (int)h.GCD(e,o);

}

int main() {

int res = evenoddgcd(12,30);

printf("%d ", res);

getchar();

return 0;

}