```
#include <iostream>
using namespace std;
int BMM(int a, int b, int c = 0) {
   if (c == 0)
   if (a > b)
      c = b/2;
   else
      c = a/2;
   if (a%c==0 and b%c==0)
      return c;
   else
      return BMM(a,b,c-1);
}
int main()
{
   int a,b;
   cin >> a >> b;
   cout << BMM(a,b);
}
```

```
#include <iostream>
using namespace std;
int main()
{
   int n;
   cin >> n;
   int* jadval = new int[n*2-1];
   for (int i = 0; i < n*2-1; i++) {
      jadval[i] = 0;
   }
   for (int j = 1; j <= n; j++) {
      for (int i = 1; i <= n*2-1; i++) {
         if (n-j < i and i < n+j)
            jadval[i] += 1;
         cout << " " << jadval[i];
      }
      cout << endl;
   }
   for (int j = n; j > 1; j--) {
      for (int i = 1; i <= n*2-1; i++) {
         if (n-j < i and i < n+j)
            jadval[i] -= 1;
         cout << " " << jadval[i];
      }
      cout << endl;
   }
}
```

```
#include <iostream>
using namespace std;
bool isPrimeNumbor(int a);
int GetPrimeNumbirs(int n) {
   int* a = new int[n];
   int num = 0;
   for (int i = 0; i < n; i++) {
      cin >> a[i];
      if (isPrimeNumbor(a[i]))
         num++;
   }
   return num;
}
bool isPrimeNumbor(int a) {
   if (a <= 1)
      return false;
   int b = 0;
   for (int i = 1; i < a/2; i++) {
      if (a%i == 0)
         b++;
   }
   if (b > 1)
      return false;
   else
      return true;
}
int main()
{
   int n;
   cin >> n;
   cout << GetPrimeNumbirs(n);
}
```

```
#include <iostream>
using namespace std;
int KamelNum(int a,int current = 6) {
   if (a <= 0)
      return current-2;
   int sum =0;
   for (int i = 1; i <= current/2; i++) {
      if (current%i == 0) {
         sum += i;
      }
   }
   if (sum == current)
      return KamelNum(a-1,current+2);
   else
      return KamelNum(a,current+2);
}

int main() {
   cout << KamelNum(1) << endl;
   cout << KamelNum(2) << endl;
   cout << KamelNum(3) << endl;
   cout << KamelNum(4) << endl;
}
```

```
#include <iostream>
using namespace std;
int loping(int n) {
    if (n==4)
        return 20;
    else if (n==3)
        return 8;
    else if (n==2)
        return 4;
    else if (n==1)
        return 3;
    else if (n==0)
        return 2;
    else
        return 2*loping(n-1) - 3*loping(n-2) + n*n;
} // -1 = 2/3
int main ()
{
    cout << loping(5);
} // man ziad in soal ro motevajeh nashodam vali saye amo kardam
```

```
#include <iostream>
#include <string>
using namespace std;

int main ()
{
  string a;
  getline(cin,a);
  for (int i = 0; i < a.length (); i++)
    {
      if ((int) a[i] == 32 or i == 0)
        a[i + 1] = toupper(a[i+1]);
        }
  cout << a;
}
```

```
#include <iostream>
#include <math.h>

using namespace std;

int main()
{
    int n;
    cin >> n;
    int a[n][n];
    int counter = 0;
    int mul1 = 1;
    int mul2 = 1;
    for (int i = 0; i < n; i++) {
        for (int j = 0; j < n; j++) {
            counter++;
            a[i][j] = counter;
            if (i == j)
                mul1 *= a[i][j];
        }
        mul2 *= a[i][n-1-i];
    }
    cout << abs(mul1-mul2);
```

}