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#include <iostream>//1319
using namespace std;
int main()
{
    int n,exp=0,d=2;
    cin>>n;
    while(n>1)
    {
        while(n%d==0)
        {
            n=n/d;
            exp++;
            cout<<d<<" ";
        }
        d++;
        if(d*d>n)
            d=n;
    }

    return 0;
}

```

```

#include <iostream>//62
using namespace std;
int main()
{
    long long n,nr,d,f;
    cin>>nr;
    d=2;
    f=0;
    while(nr%2==0 && nr>1)
    {
        nr=nr/2;
        f=f+1;
    }
    if(f>0)
        cout<<2<<" "<<f<<endl;
    d=3;
    while(nr>1)
    {
        f=0;
        while(nr%d==0)
        {
            nr=nr/d;
            f=f+1;
        }
        if(f>0)
            cout<<d<<" "<<f<<endl;
        if(d*d>nr)
            d=nr;
        else
            d=d+2;
    }
    return 0;
}

```

```

#include<iostream>//4295
using namespace std;
int main()
{
    int k,kmax=0,d=2,f=0;
    long long n;
    cin>>n;
    while(n>1)
    {
        k=0;
        while(n%d==0)
        {
            k++;
            n/=d;
        }
        if(k>=kmax)
        {
            kmax=k;
            f=d;
        }
        d++;
        if(d*d>n) d=n;
    }
    cout<<f;
    return 0;
}

```

```

#include <iostream>//2324
using namespace std;
long long n,i,maxim,j,ok ;
int main()
{
    cin >> n ;
    maxim = 0 ;
    for( i=2 ; i*i<=n ; i++ )
        if( n%i==0 )
        {
            ok=1 ;
            for( j=2 ; j*j<=i && ok==1; j++ )
                if( i%j==0 ) ok=0 ;
            if (ok==1)
                if ( i>maxim ) maxim=i ;
            while ( n%i==0 ) n = n / i ;
        }
    if ( n>1 )
        if ( n>maxim ) maxim = n ;
    cout << maxim ;
    return 0;
}

```

```

#include <iostream>//2913
using namespace std;
int main ()
{
    int n, e=1;
    cin >> n;
    n--;
    while (n % 2 == 0)
    {
        n /= 2;
        e *= 2;
    }
    if (n && n < e)
        cout << "DA";
    else
        cout << "NU";
}

```

```

#include<iostream>//2312
using namespace std;
int main()
{
    long long int n,s,d,e;
    cin>>n;
    s=0;
    d=2;
    while(n>1)
    {
        e=0;
        while(n%d==0)
        {
            e++;
            n=n/d;
        }
        if(e)
            s=s+d;
        d++;
        if(d*d>n)
            d=n;
    }
    cout<<s;
    return 0;
}

```

```
#include <iostream>//63
using namespace std;
int main()
{
    int n;
    cin >> n;
    int d=2;
    int e;
    int maxx=0;
    int dm=0;
    while(n>1)
    {
        e=0;
        while(n%d==0)
        {
            e++;
            n/=d;
        }
        if(e)
        {
            if(e>=maxx && d>dm)
                maxx=e , dm=d;
        }
        d++;
        if(d*d>n)
            d=n;
    }
    cout << dm;
```

```
#include<iostream>//2697
using namespace std;
int main()
{
    unsigned long long int n, d, x, div;
    cin >> n;
    while(n != 0)
    {
        cin >> x;
        while(x % 2 == 0)
            x = x / 2;
        cout << x << " ";
        n--;
    }
}
```

```

#include <iostream>///111
using namespace std;
int main()
{
    int n, maxim=0, xx=0,x,cnt,cx,d;
    cin >> n;
    while (n != 0)
    {
        cnt=0;
        cin >> x;
        cx = x;
        d = 2;
        while (d * d <= cx)
        {
            if (cx % d == 0)
            {
                cnt++;
                int p = 0;
                while (cx % d == 0)
                {
                    p++;
                    cx /= d;
                }
            }
            d++;
        }
        if (cx != 1) cnt++;
        if (cnt > maxim)
        {
            maxim = cnt;
            xx = x;
        }
        else if (cnt == maxim && x < xx)
            xx = x;
        n--;
    }
    cout << xx;
    return 0;
}

```

```

#include <iostream>///2821
using namespace std;
int main()
{
    int n,nr=1,d=2,p;
    cin >> n;
    while(n > 1)
    {
        p = 0;
        while(n % d == 0)
            n/=d , p++;
        if(p)
            nr = nr * d;
        d++;
        if(d * d > n)
            d = n;
    }
    cout << nr;
    return 0;
}

```

```

#include <iostream>//435
using namespace std;
int main()
{
    int a,b,ok=1,ea,eb,d=2;
    cin>>a>>b;
    while(a!=1)
    {
        ea=0;
        while(a%d==0)
        {
            a=a/d;
            ea++;
        }
        if(ea!=0)
        {
            eb=0;
            while(b%d==0)
            {
                b=b/d;
                eb++;
            }
            if(eb==0)
                ok=0;
        }
        d++;
    }
    if(ok==1)
    {
        if(b==1)
            cout<<"DA";
        else
            cout<<"NU";
    }
    else
        cout<<"NU";
    return 0;
}

```