#include<cstdio>

#include<cstring>

#include<cmath>

#include<iostream>

#include<algorithm>

#define INF 0x3f3f3f

#define ll long long

using namespace std;

struct node

{

int l,r,num;

}a[2010];

int main()

{

ll n,x;

while(~scanf("%lld",&n))

{

ll sum(0);

int m=sqrt(n);

ll l(1),r(0),cnt(0);

while(1)

{

while(sum<n)

{

r++;

sum+=(r\*r);

}

if(r>m)

break;

if(sum==n)

{

cnt++;

a[cnt].num=r-l+1;

a[cnt].l=l;

a[cnt].r=r;

}

sum-=(l\*l);

l++;

}

printf("%d\n",cnt);

for(int i=1;i<=cnt;i++)

{

printf("%d",a[i].num);

for(int j=a[i].l;j<=a[i].r;j++)

printf(" %d",j);

printf("\n");

}

}

return 0;

}