#include <cmath>

#include <cstdio>

#include <vector>

#include <iostream>

#include <algorithm>

using namespace std;

void function(long long int l,long long int r,long long int count,long long int level,long long int n,long long int fixed)

{

n++;

long long int k,size;

int flag=0;

while(l<=r)

{

k=1;

size=10;

while((r%size==0)&&((r-size+1)>=l))

{

k=k+1;

size=pow(10,pow(2,k-1));

}

k=k-1;

if(r==fixed)

level=k;

if(k==0)

size=1;

else

size=pow(10,pow(2,k-1));

//cout<<"\n"<<r<<"\t";

r=r-size;

//cout<<r<<"\t"<<k<<"\t"<<level<<"\t"<<count;

if(k==level)

{

count++;

}

else

{

flag=1;

break;

}

}

if(l>r)

{

if(flag==1)

{

cout<<++n;

cout<<"\n"<<k<<" "<<"1";

cout<<"\n"<<level<<" "<<++count;

}

else

{

cout<<n;

cout<<"\n"<<k<<" "<<++count;

}

return;

}

if(flag==1)

{

if(count>=0)

{

function(l,r,0,k,n,fixed);

cout<<"\n"<<level<<" "<<++count;

}

else

function(l,r,0,k,n-1,fixed);

}

}

int main() {

/\* Enter your code here. Read input from STDIN. Print output to STDOUT \*/

long long int l,r;

cin>>l;

cin>>r;

function(l,r,-1,0,0,r);

return 0;

}