import java.util.\*;

class Fascinating

{

void main()

{

Scanner sc=new Scanner(System.in);

System.out.println("Enter the range");

int m=sc.nextInt();

int n=sc.nextInt();

if(m>n)

{

System.out.println("INVALID INPUT");

System.exit(0);

}

else if((m<99)||(m>10000)||(n<99)||(n>10000))

{

System.out.println("INVALID INPUT");

System.exit(0);

}

else

{

int flag=0,count=0;

System.out.println("FASCINATING NUMBERS ARE: ");

for(int i=m;i<=n;i++)

{

if(fas(i)==true)

{

System.out.print(i+"\t");

flag=1;

count++;

}

}

if(flag==0)

{

System.out.println("NIL");

}

System.out.println("FREQUENCY OF FASCINATING NUMBERS IS: "+count);

}

}

boolean fas(int num)

{

int num2=num\*2;

int num3=num\*3;

String s1=Integer.toString(num);

String s2=Integer.toString(num2);

String s3=Integer.toString(num3);

String Final=s1+s2+s3;

int numarr[]=new int[10];

int result=Integer.parseInt(Final);

int copy=result;

while(copy>0)

{

int d=copy%10;

numarr[d]+=1;

copy=copy/10;

}

for(int i=1;i<10;i++)

{

if(numarr[i]!=1)

return false;

}

return true;

}

}