

<https://course.acciojob.com/idle?question=98d8c267-643c-4d17-911e-b35ca85365c8>

● MEDIUM

● Max Score: 40 Points

## Yash and Accio Numbers

Yash has a positive integer 'N'. He wants to find out all the Accio numbers which are less than or equal to 'N'. A number is called an Accio Number if all the adjacent digits in it have an absolute difference of 1.

Note: The difference between '9' and '0' is not considered as 1. All single-digit numbers are considered as Accio Numbers.

### Input Format

The only line of input contains one integer 'N'.

### Output Format

Print all the Accio Numbers smaller than or equal to N in ascending order.

### Example 1

Input

20

Output

0 1 2 3 4 5 6 7 8 9 10 12

Explanation These are all the Accio numbers from 0 to 12 as all the single-digit numbers are Accio numbers and out of the two-digit numbers only 10 and 12 are the Accio numbers less than 20 as the absolute difference in the adjacent digits of 10 and 12 is 1.

## Constraints

$1 \leq N \leq 10^8$

### Topic Tags

- Math
- Arrays

# My code

```
// n java
import java.util.*;
import java.lang.*;
import java.io.*;

public class Main
{
    public static void main (String[] args) throws
java.lang.Exception
    {
        //your code here
        Scanner s=new Scanner(System.in);
        int n=s.nextInt();

        for(int i=0;i<=n;i++){
            int c=0,r=0,m=i,count=0;
            while(m>0)
            {
```

```
int rr=m%10;
m/=10;
if((r==0)&&(count==0))
{r=rr;count++;}
else if((r-rr)==1||((rr-r)==1)) r=rr;

    else { c=1; break;}
}
if(c==0)
System.out.print(i+" ");
}
}
```