**PROBLEMS**

1. **Roll Number Game**
2. **Lesser the least**
3. **The seven game**

**Roll Number Game**

There is a roll number for every student which has digits 1-9. One has to find the least number of roll-numbers formed from the roll number where no of digits in each roll number is greater than equal to 1, each roll number is formed using consecutive digits and roll number formed should be less than or equal to P.

**Input Format**

S, string of digits

P, No sub roll number should be greater than P

L, length of the string

**Constraints**

Len(S)<30000

P<S

**Output Format**

Whole Number

**Sample Test Cases:**

**Input 1:**

7329

30

4

**Output:**

3

**Input 2:**

7632964

3000

7

**Output:**

2

**Lesser the Least:**

Given an array of elements and we have to find the series included with that array such that the pattern matches.

**Input Format**

N list of elements

**Constraints**

N<100

**Output Format**

N space seperated positive integers

**Sample Test Cases:**

**Input 1:**

4 1 3 8 1 3 2 1

**Output:**

1 5 2 0 5 2 4 5

**Input 2:**

1 5 2 0 5 2 4 5

**Output:**

6 0 4 7 0 4 3 0

**Seven Game:**

There are seven friends named a,b,c,d,e,f,g and there is a bowl of N cashews.  
Each friend follows a series and takes that number of cashews one after the other in a circular fashion following their own series respectively. Our task is to find how many rounds can the friends complete with the cashews and how many more cashews are needed to complete the next round.  
  
series of a: 2 3 5 7 11 13 17

series of b: 0 1 1 2 3 5 8

series of c: 0 1 3 4 7 6 12

series of d: 0 1 2 2 3 2 4

series of e: 1 1 2 6 24 120 720

series of f: 1 1 0 2 1 1 1

series of g: 0 1 1 2 1 2 2

**Input Format**

Number of Cashews N

**Constraints**

N<50000

**Output Format**

No of rounds  
  
No of cashews required for the next round

**Sample Test Cases:**

**Input 1:**

500

**Output:**

6

515

**Input 2:**

1500

**Output:**

7

4603

Hello 32,  
          You are one step closer to the hackathon of our CODE3000.  
 You will have 3 challenge in round 3 where you all have to participate in all challenges to qualify for hackathon.  
         **The link for challenge 2 is provided below and don’t share this link other members who are not qualified.  
  
Hackerrank link:** [www.hackerrank.com/code3000-3-0](https://www.hackerrank.com/code3000-3-0)  
  
Thank you,  
Think hard, Code smart