



STUDENT REPORT

DETAILS

Name

A.Padmini

Roll Number

3BR21CS002

EXPERIMENT

Title

SMALLEST NUMBER

Description

Two friends are playing a game. The rules of the game are as follows:

Friend 1 provides a 4-digit natural number.

Friend 2's task is to find the smallest 4-digit number that is greater than the number provided by Friend 1 and has distinct digits.

Write a function to solve this problem You are given an integer ($1000 \leq \text{num} \leq 9000$) representing the number provided by Friend 1. Your task is to find and return the smallest 4-digit number that meets the criteria mentioned above.

Example:

Input:

1220

Output:

1230

Explanation:

1230 is the smallest 4-digit number greater than 1220 and it contains distinct digits

Source Code:

```
n=int(input())
n+=1
while n<=9999:
    dig=str(n)
    if len(set(dig))==4:
        break
    n+=1
print(n)
```

RESULT

5 / 5 Test Cases Passed | 100 %