

## Validating UID

ABCXYZ company has up to 100 employees.

The company decides to create a unique identification number (UID) for each of its employees.

The company has assigned you the task of validating all the randomly generated UIDs.

A valid UID must follow the rules below:

- It must contain at least 2 uppercase English alphabet characters.
- It must contain at least 3 digits (0 - 9).
- It should only contain alphanumeric characters (*a - z*, *A - Z* & 0 - 9).
- No character should repeat.
- There must be exactly 10 characters in a valid UID.

### Input Format

The first line contains an integer  $T$ , the number of test cases.

The next  $T$  lines contains an employee's UID.

### Output Format

For each test case, print 'Valid' if the UID is valid. Otherwise, print 'Invalid', on separate lines. Do not print the quotation marks.

### Sample Input

```
2
B1CD102354
B1CDEF2354
```

### Sample Output

```
Invalid
Valid
```

### Explanation

**B1CD102354:** 1 is repeating → Invalid

**B1CDEF2354:** Valid

```
1  # Enter your code here. Read input from STDIN. Print output to STDOUT
2  import re
3
4  # Correct regex pattern
5  p = re.compile(r'^(?=(:.*[A-Z]){2,})(?=.*\d){3,})(?!.*(?:.*\1)[A-Za-z\d]{10}$)')
6
7  a = int(input())
8  for i in range(a):
9      s = input()
10     if p.fullmatch(s):
11         print('Valid')
12     else:
13         print('Invalid')
14
```