Validating UID

90/115 challenges solved

Rank: 31213 | Points: 1605

Problem Submissions Leaderboard Editorial

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

Change Theme Language Python 3

```
# Enter your code here. Read input from STDIN. Print output to STDOUT
import re

def is_valid_uid(uid):
    # Rule 1: Exactly 10 characters
    if len(uid) != 10:
        return False

    # Rule 2: Only alphanumeric characters
    if not uid.isalnum():
        return False

    # Rule 3: At least 2 uppercase letters
    if len(re.findall(r'[A-Z]', uid)) < 2:
        return False

    # Rule 4: At least 3 digits
    if len(re.findall(r'\d', uid)) < 3:
        return False

    # Rule 5: No repeating characters
    if len(set(uid)) != len(uid):
        return False

    return True

n = int(input())
for _ in range(n):
    uid = input().strip()
    print("Valid" if is_valid_uid(uid) else "Invalid")

```

EMACS Line: 31 Col: 1

Upload Code as File

Test against custom input

Run Code Submit Code

Test case 0

Test case 1

Test case 2

Test case 3

Compiler Message

```
Success
```

Input (stdin) Download

```
2
B1CD102354
B1CDEF2354
```

Expected Output Download

```
Invalid
Valid
```

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