

Valid DNA

Input File: dna.txt

DNA is made of of nitrogen bases that form a long sequence. There are four nitrogen bases: A, T, C, and G. Since DNA is made of two strands, each of these sequences is paired with another strand that contains the exact opposite pattern. An A on one strand always pairs up with a T on the other and a C on one strand always pairs up with a G on the other. Therefore, if one sequence is ATCGC, the other sequence will be TAGCG. Your task is to determine whether the given DNA sequences follow this rule or not.

Input:

The first line contains an integer N, representing the number of sets of DNA. The following N sets of data each contain two lines, with one ten-letter sequence of A's, T's, C's, and G's on each line.

Output:

For each set of data, determine whether the two sequences of nitrogen bases are valid to be paired together (A must go with T, C must go with G). Either output "Valid" or "Invalid."

Example Input:

```
3
ACTACGCATC
TGATGCGTAG
GCATGACTAG
CGTAGACATC
GTCATCGATC
CAGTAGCTAG
```

Example Output:

```
Valid
Invalid
Valid
```