# Detecting Valid Latitude and Longitude Pairs

Given a line of text which possibly contains the latitude and longitude of a point, can you use regular expressions to identify the latitude and longitude referred to (if any)?

**Input Format**
The first line contains an integer N, which is the number of tests to follow.
This is followed by N lines of text. Each line contains a pair of co-ordinates which possibly indicate the latitude and longitude of a place.

**Constraints**
1 <= N <= 100
The latitude and longitude, if present will always appear in the form of (X, Y) where X and Y are decimal numbers.
For a valid (latitude, longitude) pair:
-90<=X<=+90 and -180<=Y<=180.
They will not contain any symbols for degrees or radians or N/S/E/W. There may or may not be a +/- sign preceding X or Y.
There will be a space between Y and the comma before it.
There will be no space between X and the preceding left-bracket, or between Y and the following right-bracket.
There will be no unnecessary zeros (0) before X or Y.

**Output Format**
"Valid" where X and Y are the latitude and longitude which you found to be a valid (latitude,longitude) pair.
If the given pair of numbers are not a valid (latitude,longitude) pair, output "Invalid".

**Sample Input**

```
12
(75, 180)
(+90.0, -147.45)
(77.11112223331, 149.99999999)
(+90, +180)
(90, 180)
(-90.00000, -180.0000)
(75, 280)
(+190.0, -147.45)
(77.11112223331, 249.99999999)
(+90, +180.2)
(90., 180.)
(-090.00000, -180.0000)
```

**Sample Output**

```
Valid
Valid
Valid
Valid
Valid
Valid
Invalid
Invalid
Invalid
Invalid
Invalid
Invalid
```

**Explanation**

The first six pairs are valid because X, Y satisfy the criteria related to formatting issues, and they satisfy the conditions restricting the numerical range(s) of X and Y. The next six pairs are all invalid because: The first four (among this invalid group) do not satisfy the conditions restricting the numerical range(s) of X and Y. (90., 180.) is invalid because of an extra dot (.) after 90 and 180.
(-090.0000, -180.0000) is invalid because of the redundant zero (0) before 90.