Scenario

When a user dials a phone number, the user can dial a number either dial the number in the national format or dial in an international format.

National numbers begin with a national trunk prefix. The National trunk prefix can be any length including zero. See examples below.

Country	Sample National Number Highlighting National Trunk Prefix
United Kingdom (GB)	**0**7833733777
France (FR)	**0**149527154
United States of America (US)	**1**212233200
Hong Kong (HK)	25218121

International numbers begin with "+" followed by the country code. See examples below.

Country	Sample International Number Highlighting Country Code
United Kingdom (GB)	**+44**7833733777
France (FR)	**+33**149527154
United States of America (US)	**+1**212233200
Hong Kong (HK)	**+852**25218121

Task

Write a class named '**NumberParser**' that is constructed with two maps. One is a mapping of country to country code and the other is a mapping of country to national trunk prefix. This class must implement a method called '**parse'.** The parse method takes the dialled number and the user number strings and returns the international number as a string.

Sample User Journeys

Country Codes

Country	Country Code	National Prefix
UK	+44	0
FR	+33	0
US	+1	1

UK to UK

Given that the user is has the number +447866866886

And they dial 07277822334

Then the number should be parsed to +447277822334

US to US

Given the user has the number +1212233200

And they dial 1312233244

Then the number should be parsed to + 1312233244

UK to US

Given the user has the number +447866866886

And they have dialled +1312233244

the User Number is +1212233200
when the user dials 1312233244
then the parsed number is + 1312233244

Requirements

- The solution **MUST** be in the following format:

```
public class NumberParser {
    public NumberParser(Map<String, Integer> countryCodes, Map<String, String> nationalTrunkPrefixes) {
        // TODO
    }

    public String parse(String dialledNumber, String userNumber) {
        // TODO
    }
}
```

- The method 'parse' **MUST NOT** throw a checked exception

Recommendations

- We are happy for the solution to be written in any JVM language,
- Please undertake this task as you would for any piece of work in your normal day-to-day environment, keeping in mind all the usual aspects of software development.
- You can take the time you need for this task, we are not assessing this based on the speed of submission but instead would like to see a strong submission against various typical software development criteria. However, please let us know if you require more than a week.