

## CS225 Lab – Strings: Emirps Project

### Create a C++ Project

#### User Requirements:

- An emirp (prime spelled backwards) is a prime number whose reversal is also a prime. For example, 17 is a prime and 71 is also a prime, therefore 17 and 71 are emirps. Write a C++ program that computes and displays the number of emirps requested by the user with one space between each number. **Note** that you must **not** display palindromic primes (e.g., 2, 3, 5, 7, 11, 101, 131, etc.) in the output.

#### Sample Program Execution:

How many EMIRPS do you want to display: 20

13 17 31 37 71 73 79 97 107 113 149 157 167 179 199 311 337 347 359 389

Figure 1: Displaying 20 emirps

#### Software Requirements:

- Create and use a function that receives a possible prime number and returns true or false.
  - **Function name:** isPrime
  - **Parameter:** possPrimePar As Integer
  - **Function return type:** boolean
- Create and use a function that receives a possible emirp number and returns true or false.
  - **Function name:** isEmirp
  - **Parameter:** possEmirpPar As Integer
  - **Function return type:** boolean