Prime Coding Exercise

Note: This application was coded using Microsoft .NET Framework, version 4.6.1. If this framework is not installed on your computer, the application will not execute.

The following links can help in determining if the framework is installed and, if not, where to retrieve it from Microsoft web site.

- How to: Determine Which .NET Framework Versions Are Installed
  - https://msdn.microsoft.com/en-us/library/hh925568(v=vs.110).aspx
- Microsoft .NET Framework 4.6.1 (Web Installer)
  - https://www.microsoft.com/en-us/download/details.aspx?id=49981

The Prime check application has two coding components

- Setec.Astronomy.exe (executable)
- Setec.Astronomy.exe.config (executable configuration file.)

These files are included in the Setec.Astronomy.zip file in my GetHub Executable directory.

1) Download the zip file and extract the files to a location on your computer.
2) To execute the application, open up the Command Prompt Tool in Windows.

   - Open Command Prompt in Windows 10
     - Click the Start button.
     - Click All apps.
     - Click the Windows System folder from the list of apps.
     - Click Command Prompt.

   - Open Command Prompt in Windows 8 or 8.1
     - Click the down arrow icon at the bottom of the screen.
     - Click the Windows System section heading.
     - Click Command Prompt.

   - Open Command Prompt in Windows 7, Vista, or XP
     - Click Start button.
     - Click All Programs.
     - Click Accessories.
     - Click Command Prompt.

   Command Prompt should open right away.

3) Navigate to the directory where via the Command Prompt to where the files were extracted in Step 1. Using the cd method. (cd [folder path]
   a. Example: cd c:\Setec.Astronomy
4) In the extracted directory type in the following command-line and press the enter key.
   a. c:\ Setec.Astronomy>Setec.Astronomy.exe 250
5) The following output should be displayed in the Command Prompt window.

```
Processing Start.
```

```
Command-line argument for processing provided: 250
Prime values less than 250 to be identified.
Prime value 2 identified.
Prime value 3 identified.
Prime value 5 identified.
Prime value 7 identified.
Prime value 11 identified.
Prime value 13 identified.
Prime value 17 identified.
Prime value 19 identified.
Prime value 23 identified.
Prime value 29 identified.
Prime value 31 identified.
Prime value 37 identified.
Prime value 41 identified.
Prime value 43 identified.
Prime value 47 identified.
Prime value 53 identified.
Prime value 59 identified.
Prime value 61 identified.
Prime value 67 identified.
Prime value 71 identified.
Prime value 73 identified.
Prime value 79 identified.
Prime value 83 identified.
Prime value 89 identified.
Prime value 97 identified.
Prime value 101 identified.
Prime value 103 identified.
Prime value 107 identified.
Prime value 109 identified.
Prime value 113 identified.
Prime value 127 identified.
Prime value 131 identified.
Prime value 137 identified.
Prime value 139 identified.
Prime value 149 identified.
Prime value 151 identified.
Prime value 157 identified.
Prime value 163 identified.
Prime value 167 identified.
Prime value 173 identified.
Prime value 179 identified.
Prime value 181 identified.
Prime value 191 identified.
Prime value 193 identified.
Prime value 197 identified.
Prime value 199 identified.
Prime value 211 identified.
Prime value 223 identified.
Prime value 227 identified.
Prime value 229 identified.
Prime value 233 identified.
Prime value 239 identified.
Prime value 241 identified.
Begin processing prime numbers to function Secret()
End processing prime numbers to function Secret()
Processing Completed.
Press the 'Enter' key to shut down.
```

6) Press the ‘Enter’ key to shut down the application.
7) You can run the application with your own chosen numeric value.
    a. c:\ Setec.Astronomy>Setec.Astronomy.exe [numeric value]
8) Once you have completed running the application type ‘exit’ at the command-line and press the ‘Enter’ key to close the Command Prompt Window.
    a. c:\ Setec.Astronomy>exit