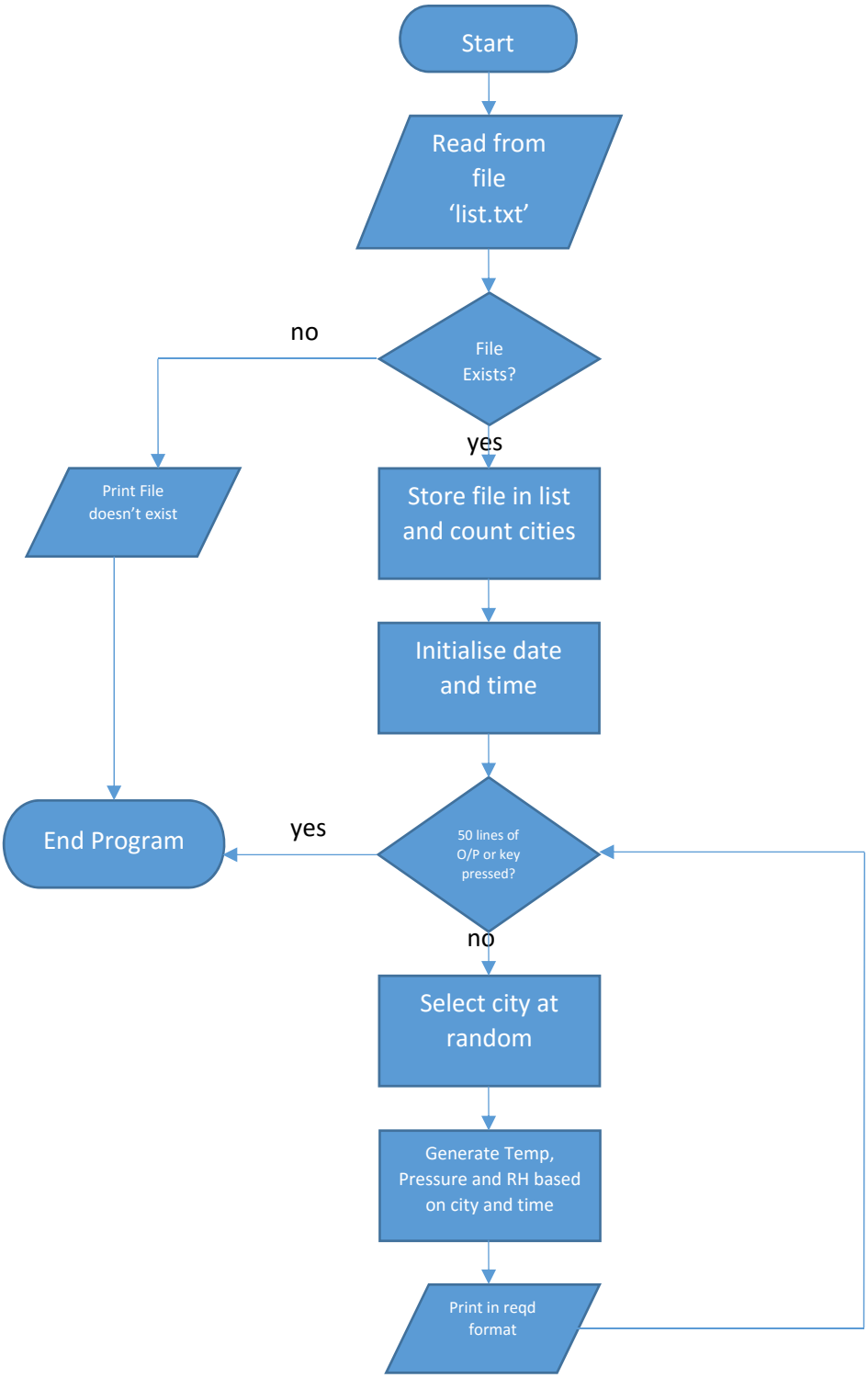
Artificial Data for Toy Simulation Environment

Documentation

Flowchart:



Details:

1. The code is written in Python 2.7
2. To run the code please use the command "*python Weather_generator.py*"
3. Please ensure that the file "list.txt" is in the same folder as the script for execution, else modify the path in the file. The input in list.txt file must be in the following format "*Location,Longitude,Latitude,Altitude"*
   Eg: Adelaide,-34.92,138.62,48
4. Sample output:

   Paris|48.48,2.2,35|2016-08-26T19:26:41Z|Sunny|+44.24|980.99|97

   Reykjavik|64.04,-21.58,53|2016-08-29T16:53:52Z|Snow|+16.87|987.83|13

   Johannesburg|-26.12,28.04,1753|2016-08-31T16:49:56Z|Sunny|+22.59|1077.19|54

   Tokyo|35.4,139.45,44|2016-09-05T12:40:51Z|Rain|+14.15|1019.79|97

Assumptions:

1. There is a list of cities available to read from with their latitude, longitude and altitude in a CSV format. The file should be named "list.txt" for this program. However, functionality can be added to have the user give the file name and then the program can read it from the specified path.
2. Right now the weather data is randomly generated. The program can be modified to read the location from another program like a GPS based app or a weather API and it can be linked to the Python code to get "real" input.