

Task 1

Your task is to create a live weather displaying application using APIs and excel to display and control the data being presented to the user.

1. Select a live weather API which can provide you with live updating temperatures. You can choose from the ones below or any other of your choice which can be used to get live temperature data at an interval of seconds. Weather APIs -

<https://openweathermap.org/current> <https://weatherstack.com/>

<https://www.worldweatheronline.com/>

2. Use a python excel module like xlwings, pyexcel, openpyxl etc. (You can also use Django, Flask etc. instead of using excel) to update the excel sheet cells at an interval of a few seconds.

3. Description of excel file

➤ Sheet 1 is the main sheet and it must contain the following columns

- City Name (use more than 1)
- Temperature
- Option to change temperature (C/F)
- Option to stop updating the temperature value(0/1)

➤ Sheet 2 will contain all possible values for city names

➤ Sheet 3(optional) will contain any other details necessary for execution of your code.

4. Create a requirements.txt file for your code.

5. Upload your code on a public repository on GitHub (preferred) or send us a zip containing all necessary files.

Task 2

Build a screener on the data sheet named NIFTY25JUN2010000PE.csv which is attached.

The strategy workflow is as follows:-

- Convert 1 minute timeframe data 15 minutes
- If low of candle is less than previous low we enter short position, with 2 exit criteria's
 - Exit at end of day
 - Exit if the high of previous candle is broken

Compute the profit/loss(entry price - exit price) from this strategy and upload the code on github.