Custom TP/SL functions:

TP and SL Functions are stored in SetSLTP() in TradingStrats.py.
Current choices available:

%: percentage of price

x ATR: multiple of the ATR

x (Swing High/Low) level 1, level 2 or level 3: Swing high and low with the level indicating the significance of the swing (how many points to either side which are below/ above)

x (Swing Close) level 1, level 2 or level 3: Swing Close with the level indicating the significance of the swing (how many points to either side which are below/ above)

Here is where you'd add the logic of your SL/TP custom calculation by adding an elif statement similar to this with a string to reference for logic execution:

```
735
736     elif TP_SL_choice == 'x (Swing Close) level 1' or TP_SL_choice == 'x (Swing Close) level 2' or TP_SL_choice == 'x (Swing Close) level 3':
737         high_swing = Close[current_index]
738         low_swing = Close[current_index]
```

Any logic to calculate data needed for the custom TP/SL should be put in Bot_Class.update_TP_SL():

```
144
145     def update_TP_SL(self):
146         ## Run Once in Backtester/ Run every candle in Live Bot
147         if self.TP_SL_choice == '%':
148             self.take_profit_val = [(self.TP_mult / 100) * self.Close[i] for i in range(len(self.Close))]
149             self.stop_loss_val = [(self.SL_mult / 100) * self.Close[i] for i in range(len(self.Close))]
150 
151         if self.TP_SL_choice == 'x (ATR)':
152             ATR = np.array(average_true_range(pd.Series(self.High), pd.Series(self.Low), pd.Series(self.Close)))
```

Reason for this is this will execute once at the start of a backtest calculating all the TP/SL values needed, this will speed up backtests tremendously.

Lastly you need to add this string value to TP_SL_options in app.py:

```
339     SL.insert(0, "1")
340     TP_SL = StringVar()
341     TP_SL_options = ['%', 'x (ATR)', 'x (Swing High/Low) level 1', 'x (Swing Close) level 1',
342                      'x (Swing High/Low) level 2', 'x (Swing Close) level 2', 'x (Swing High/Low) level 3',
343                      'x (Swing Close) level 3']
```

This will make the option visible on the GUI.