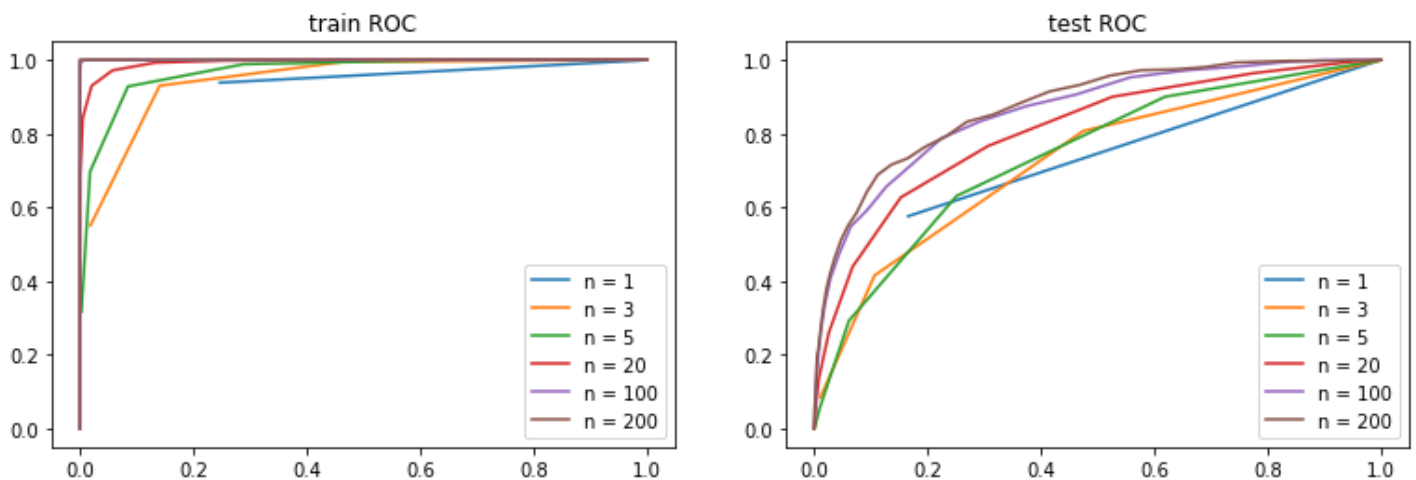


1. 根據Viola和Jone的AdaBoost方法，在1,3,5,20,100,200個weak classifiers下，CBCL資料庫裡的training data和testing data，以不同的threshold畫出ROC曲線



2. 找一張有多個人臉的照片來TEST，取前100個特徵組出的分類器，用sliding window來偵測圖片中各個區域19*19的人臉，在原圖上標出分類器判定為人臉的正方形（建議先把照片縮放到每張人臉約為19X19）

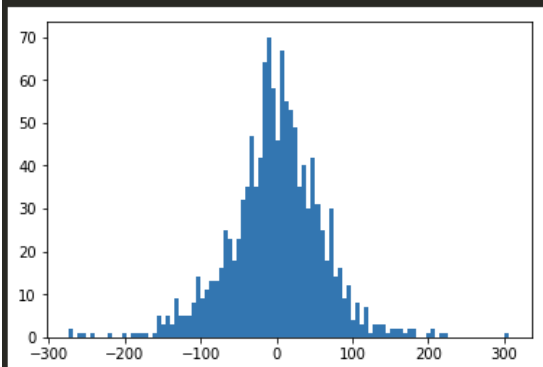


3. 整理上課提到的投資策略模擬0.0-3.1，針對每種策略
 1. 寫一句簡短描述該策略的句子
 2. 製作一張表格紀錄五個數值：(1) 進場次數 (2) 總損益點數 (3) 勝率 (4) 賺錢時平均每次獲利點數 (5) 輸錢時平均每次損失點數
 3. 繪製兩張圖：(1) 逐日累積損益 (2) 每日損益分佈圖

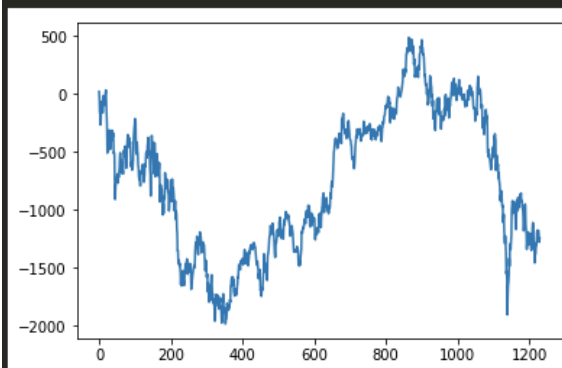
strategy 0.0 :

開盤買進一口，收盤的時候賣掉

```
***** strategy 0.0 *****
進場次數:1230
total: -1246.0
win ratio: 0.4991869918699187
win avg: 44.77850162866449
lose avg: -46.65584415584416
profit distribution:
```



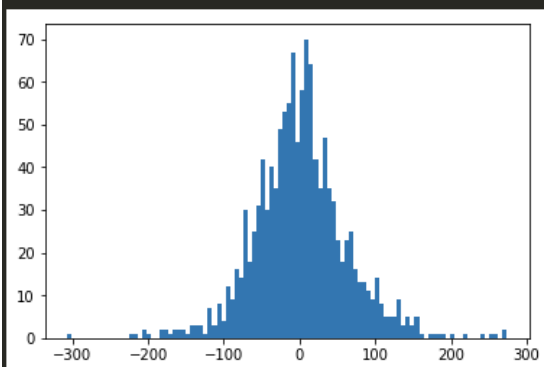
accumulated profit:



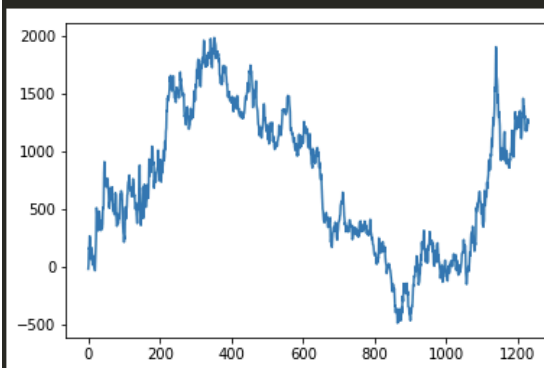
strategy 0.1 :

開盤就賣一口，收盤時買回

```
***** strategy 0.1 *****
進場次數:1230
total: 1246.0
win ratio: 0.4943089430894309
win avg: 47.26973684210526
lose avg: -44.20257234726688
profit distribution:
```



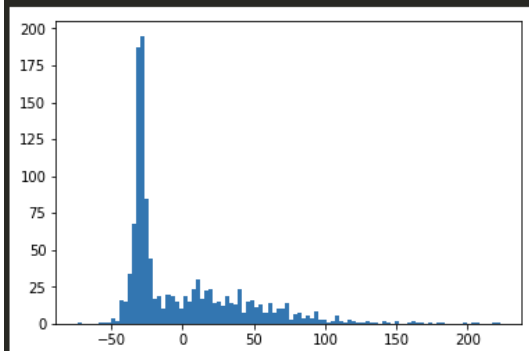
accumulated profit:



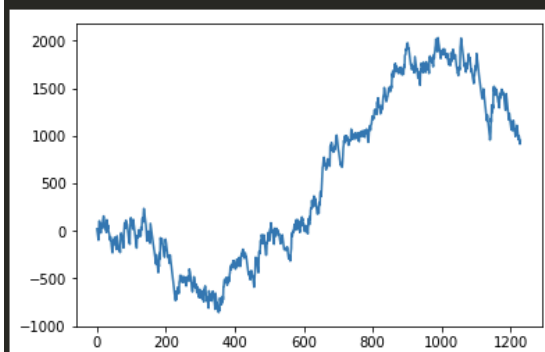
strategy 1.0 :

開盤買進一口，30點停損，收盤賣掉

```
***** strategy 1.0 *****
進場次數:1230
total: 948
win ratio: 0.37886178861788616
win avg: 46.80472103004292
lose avg: -27.30759162303665
profit distribution:
```



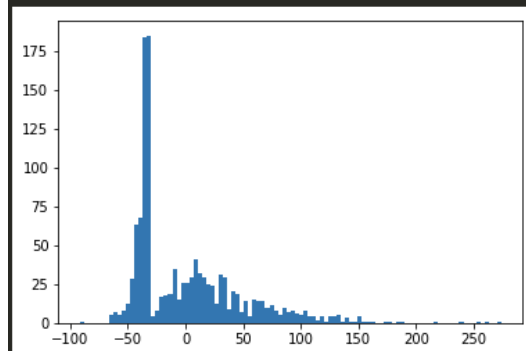
accumulated profit:



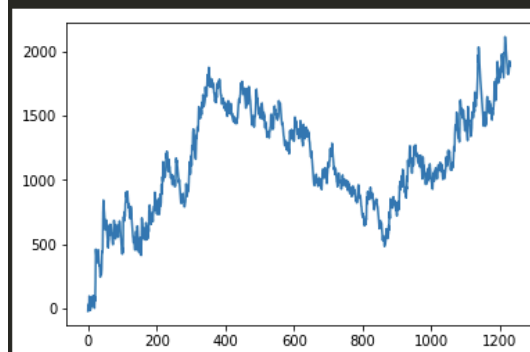
strategy 1.1 :

開盤空一口，30點停損，收盤買回

```
***** strategy 1.1 *****
進場次數:1230
total: 1885
win ratio: 0.4186991869918699
win avg: 48.0252427184466
lose avg: -31.955244755244756
profit distribution:
```



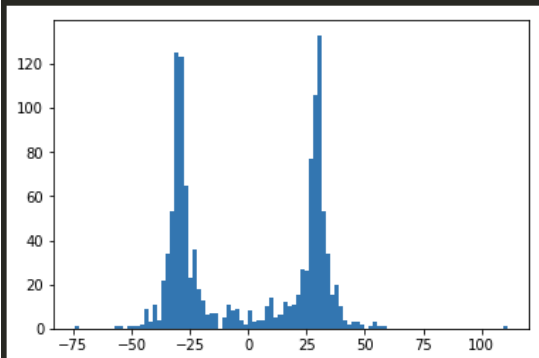
accumulated profit:



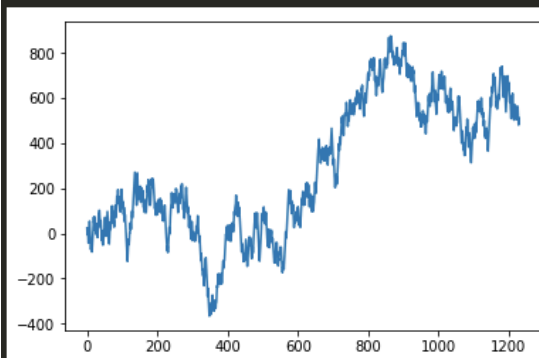
strategy 2.0 :

開盤買進一口，30點停損停利，收盤賣出

```
***** strategy 2.0 *****
進場次數:1230
total: 512
win ratio: 0.5048780487804878
win avg: 27.996779388083738
lose avg: -27.707717569786535
profit distribution:
```



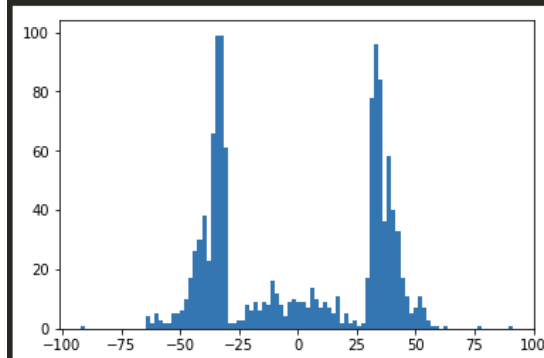
accumulated profit:



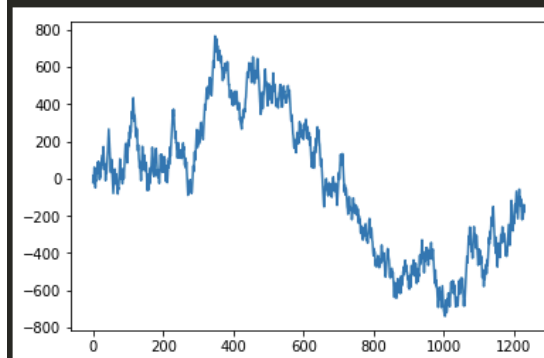
strategy 2.1 :

開盤空一口，30點停損停利，收盤買進

```
***** strategy 2.1 *****
進場次數:1230
total: -179
win ratio: 0.491869918699187
win avg: 33.25785123966942
lose avg: -32.48
profit distribution:
```



accumulated profit:

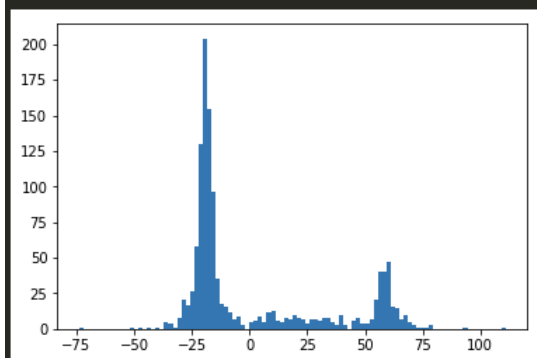


strategy 3.0 :

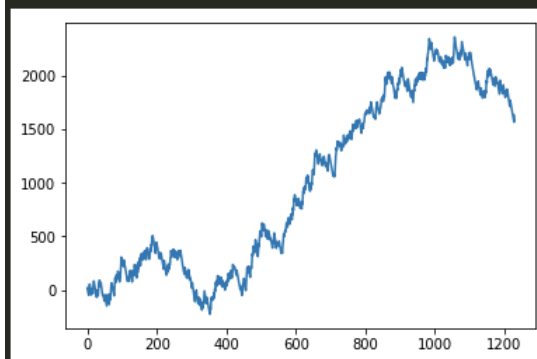
找到一組m,n改進策略2.0

讓總損益點數最佳化

```
***** strategy 3.0 *****
進場次數:1230
total: 1625
win ratio: 0.3252032520325203
win avg: 43.8125
lose avg: -19.156626506024097
profit distribution:
```



accumulated profit:

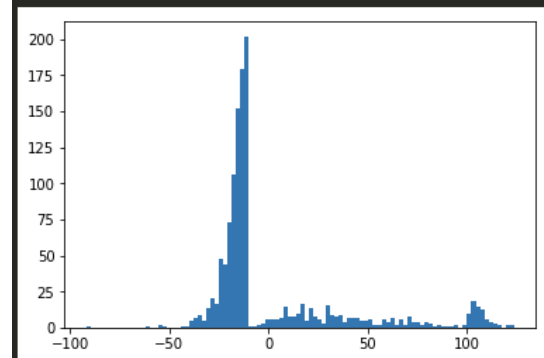


strategy 3.1:

找到一組m,n改進策略2.1

讓總損益點數最佳化

```
***** strategy 3.1 *****
進場次數:1230
total: 2149
win ratio: 0.26910569105691057
win avg: 52.3202416918429
lose avg: -16.87319243604046
profit distribution:
```



accumulated profit:

