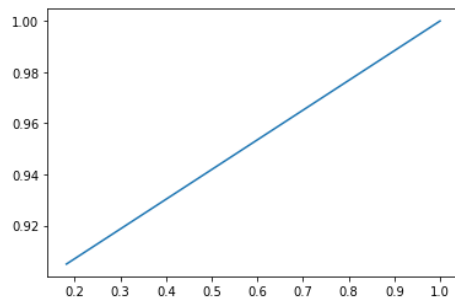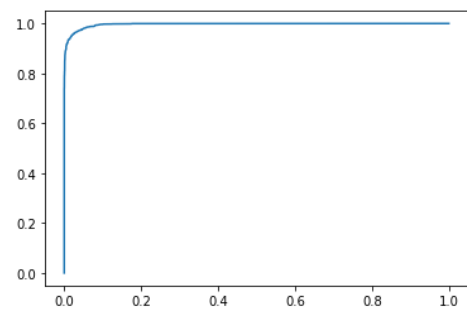# 1. Training data

1 個 weak classifiers

20 個 weak classifiers

3 個 weak classifiers

100 個 weak classifiers

5 個 weak classifiers

200 個 weak classifiers

Testing data

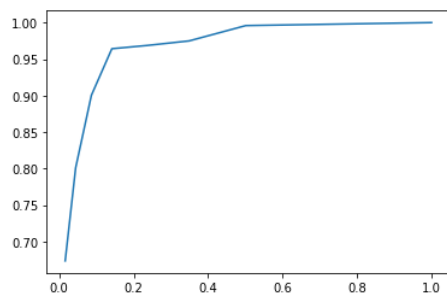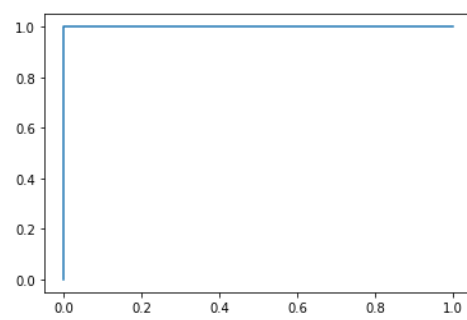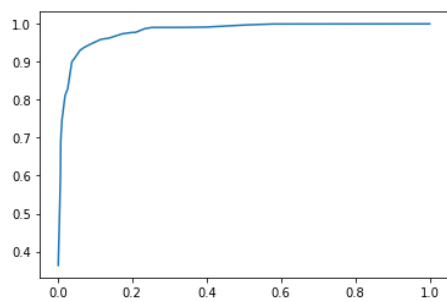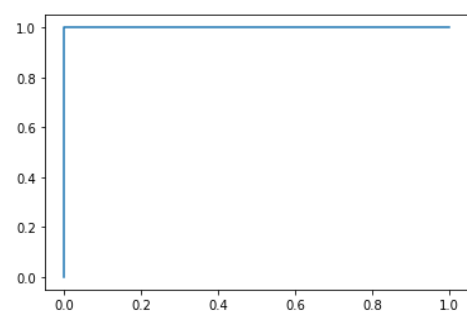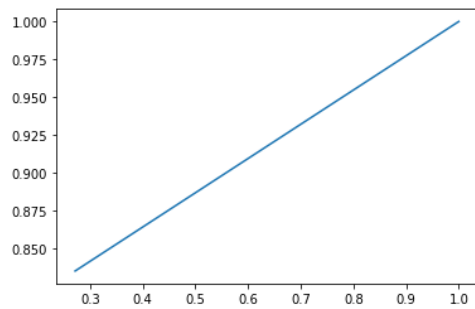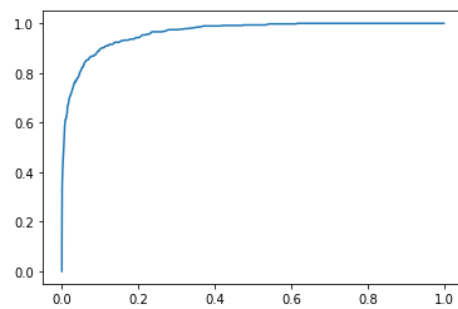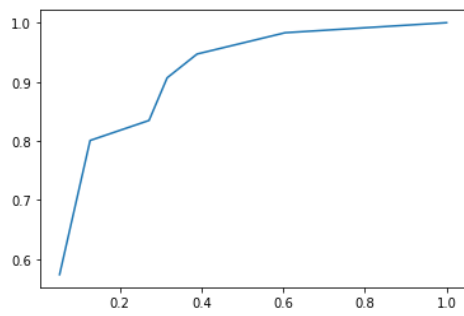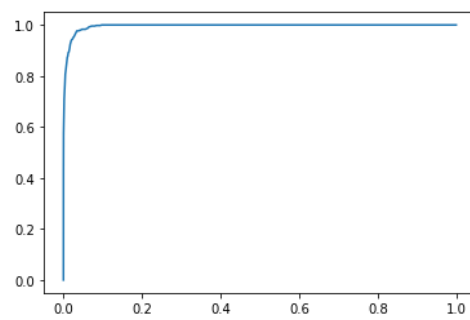### 1 個 weak classifiers

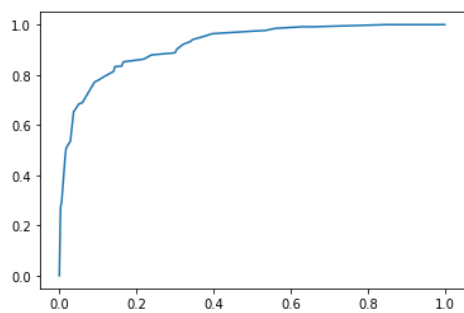### 20 個 weak classifiers

3 個 weak classifiers

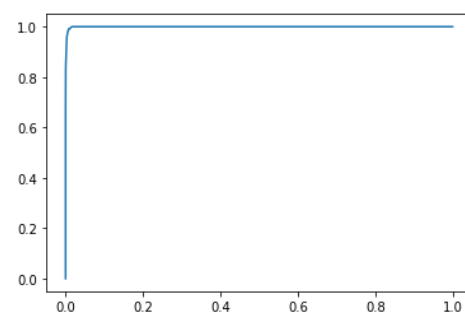### 100 個 weak classifiers

5 個 weak classifiers

200 個 weak classifiers

2.

3.

策略 0.0：每天開盤前掛市價買，第一分鐘開盤買進，每天最後一分鐘掛市價賣，收盤價賣出

```
************ strategy 0.0 ************
entry times:  1230
total: -1246.0
win ratio: 0.4991869918699187
win avg: 44.77850162866449
lose avg: -46.65584415584416
```
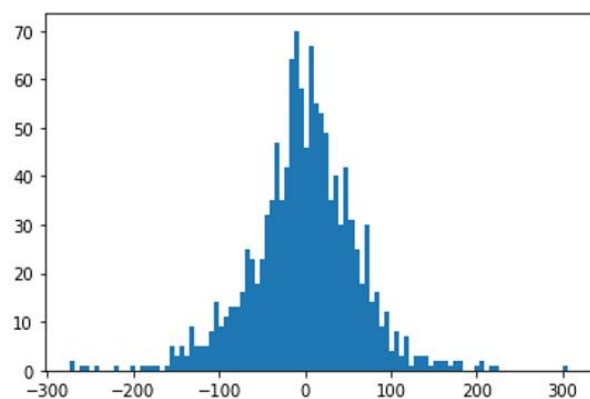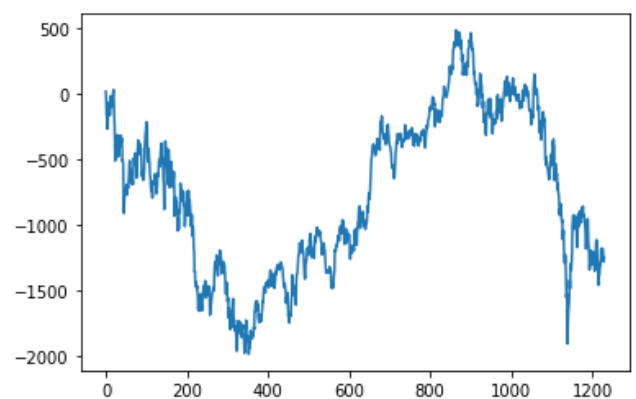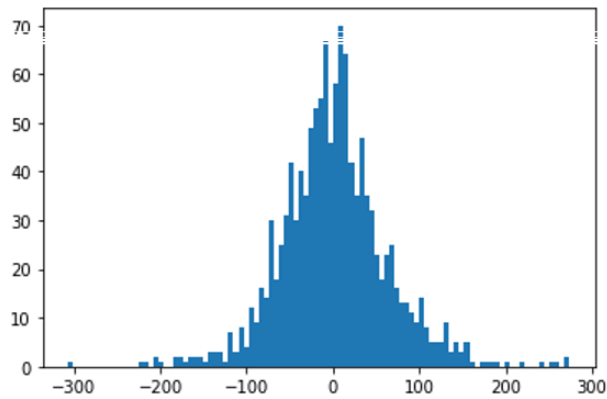
profit distribution:

accumulated profit:

策略 0.1：開盤空一口台指期，收盤時平倉
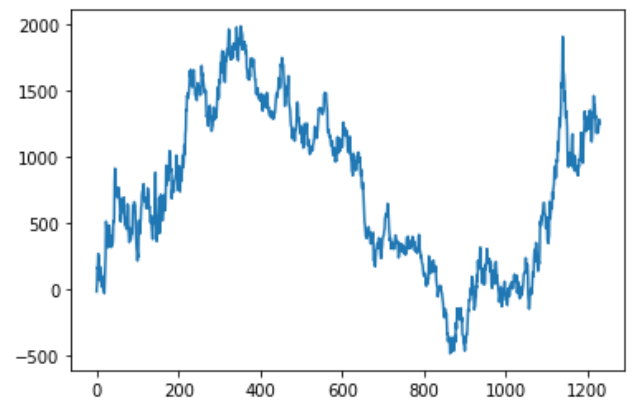
```
*********** strategy 0.1 ************
entry times:  1230
total: 1246.0
win ratio: 0.4943089430894309
win avg: 47.26973684210526
lose avg: -44.20257234726688
```

profit distribution:

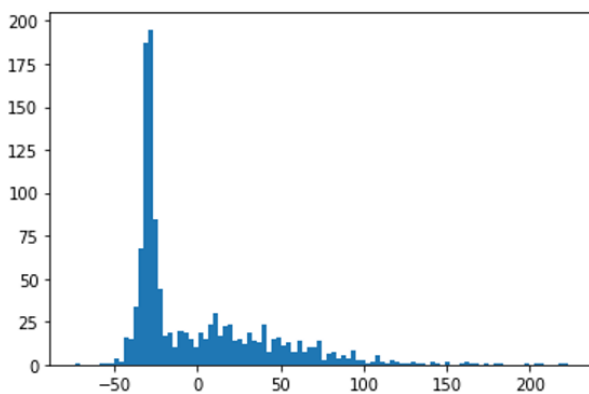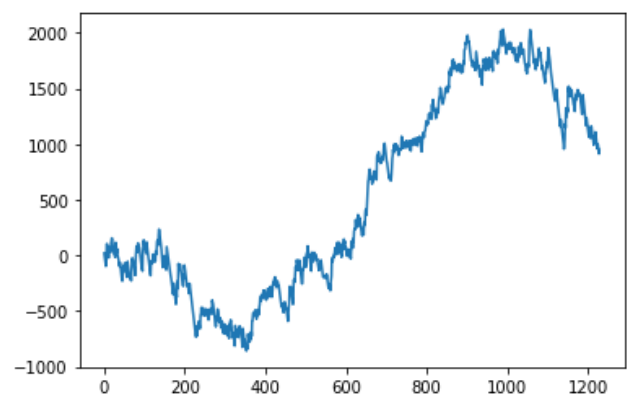accumulated profit:

策略 1.0：開盤買進一口，30 點停損，收盤平倉

```
*********** strategy 1.0 ************
entry times:  1230
total: 948
win ratio: 0.37886178861788616
win avg: 46.804721030004292
lose avg: -27.30759162303665
```
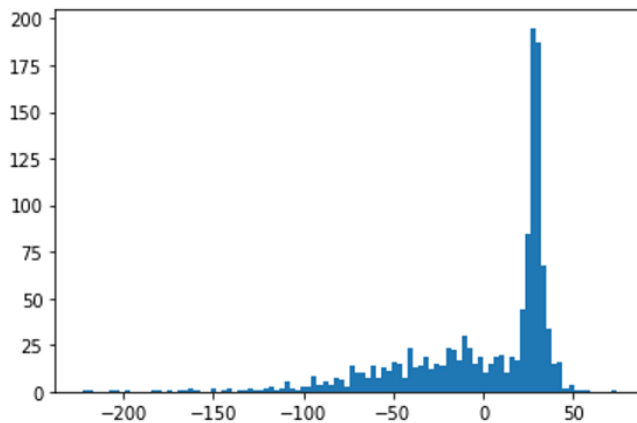
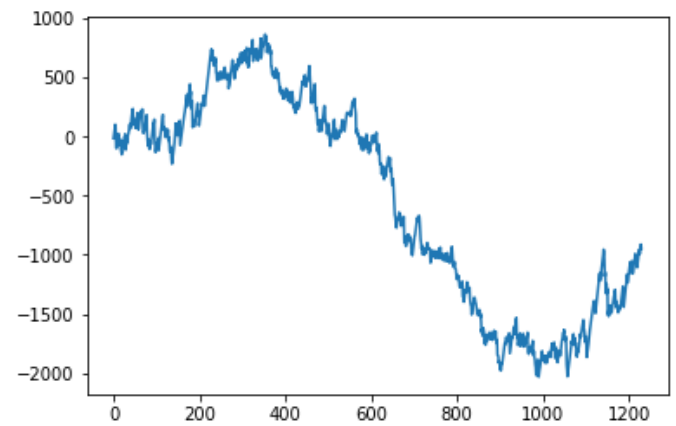profit distribution:

accumulated profit:

策略 1.1：開盤空一口，30 點停損，收盤平倉

```
*********** strategy 1 1 ***********
entry times:  1230
total: -948
win ratio: 0.6178861788617886
win avg: 27.451315789473686
lose avg: -46.40638297872341
```

profit distribution:

accumulated profit:
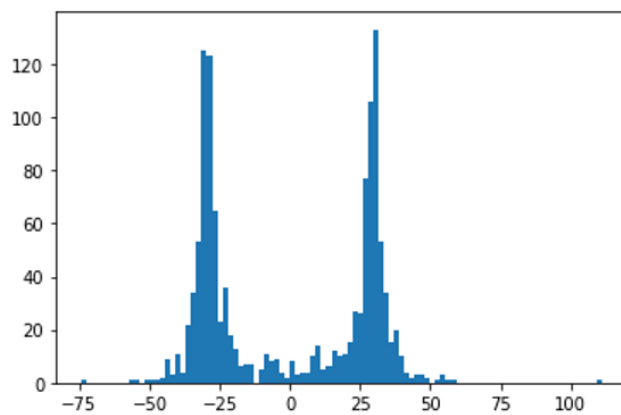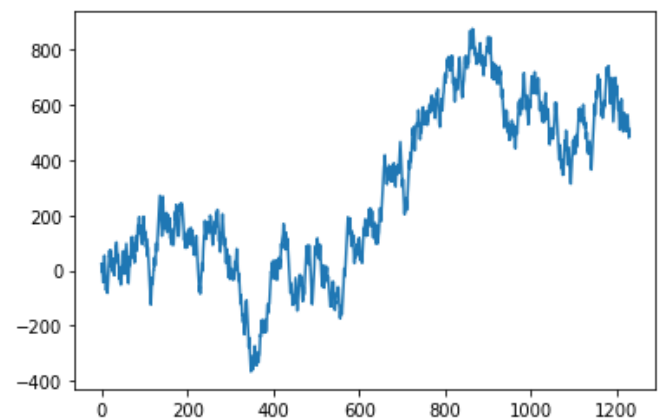

策略 2.0：開盤買進一口，30 點停損，30 點停利，收盤平倉

```
*********** strategy 2.0 ***********
entry times:  1230
total: 512
win ratio: 0.5048780487804878
win avg: 27.996779388083738
lose avg: -27.707717569786535
```
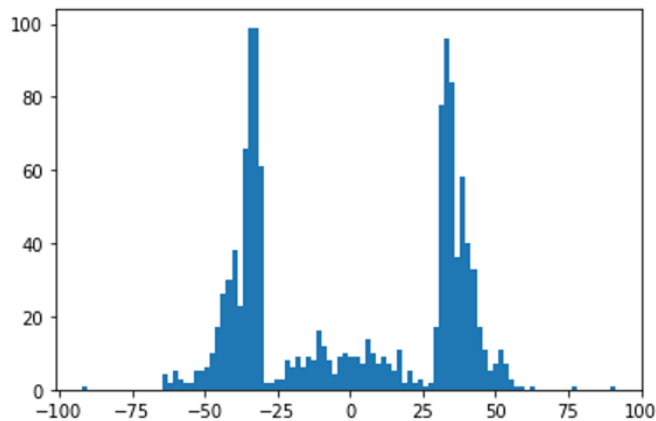
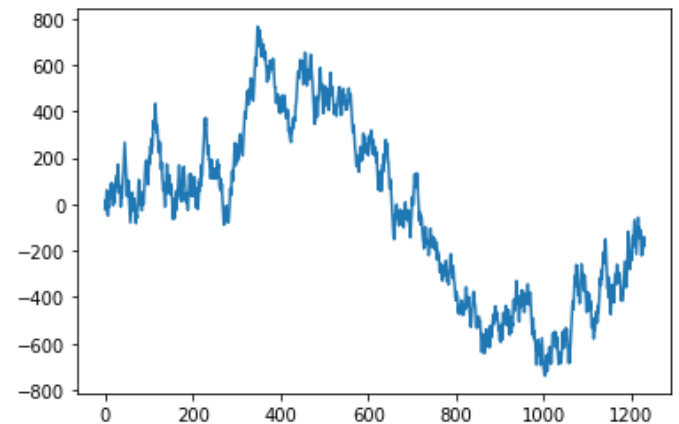profit distribution:

accumulated profit:

策略 2.1：開盤空一口，30 點停損，30 點停利，收盤平倉

```
************ strategy 2.1 ************
entry times:  1230
total: -179
win ratio: 0.4918699918699187
win avg: 33.25785123966942
lose avg: -32.48
```
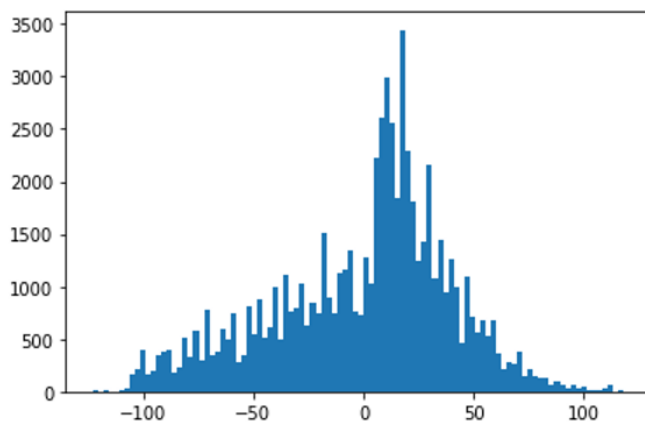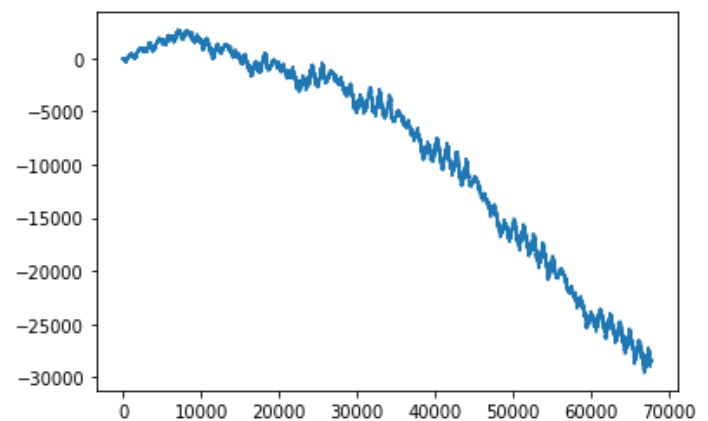
profit distribution:

accumulated profit:

策略 3.0：找到一組 m, n 改進策略 2.0 使總損益點數最佳化

```
************ strategy 3.0 ************
[m,n] =  [40, 10]
entry times 1230
total: -28454
win ratio: 0.5879970436067997
win avg: 27.27024988687214
lose avg: -39.940083237657866
```

profit distribution:

accumulated profit:

策略 3.1：找到一組 m, n 改進策略 2.1 使總損益點數最佳化

```
************ strategy 3.1 ************
[m,n] = [100, 100]
entry times 1230
total: 42147
win ratio: 0.43215077605321506
win avg: 42.59627159226954
lose avg: -31.319927111805285
```
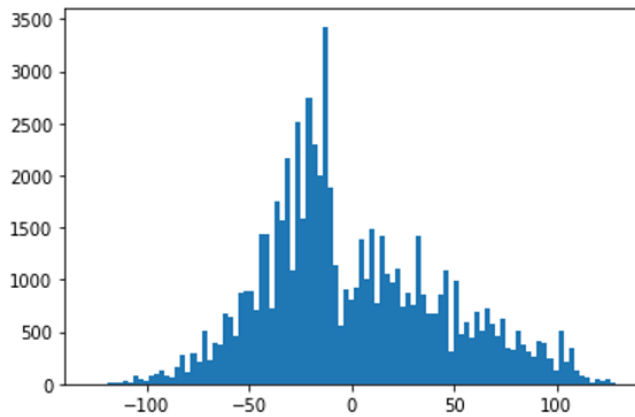
profit distribution:

accumulated profit: