1. Which of the following library has DataFrame object? 1 point

- ○ Numpy
- ○ Statsmodels
- ◉ Pandas
- ○ Matplotlib

2. Which of the following is the correct way to import a library, eg Pandas? 1 point

- ○
```
#include <pandas>
```
- ○
```
pandas import
```
- ○
```
pandas
```
- ◉
```
import pandas as pd
```

3. What is the method of DataFrame object to import a csv file? 1 point

- ○ read_csv()
- ○ csv()
- ○ import_csv()
- ◉ from_csv()

4. Which of the following attributes of a DataFrame return a list of column names of this DataFrame? 1 point

- ◉ columns
- ○ shape
- ○ dtype
- ○ column

5. Which of the following can slice 'Close' from '2015-01-01' to '2016-12-31' from data, which is a DataFrame object? 1 point

- ○
```
data.iloc['2015-01-01':'2016-12-31', 'Close']
```
- ◉
```
data.loc['2015-01-01':'2016-12-31', 'Close']
```

6. What is the method of DataFrame to plot a line chart? 1 point

- (•) plot()
- ( ) plot_graph()
- ( ) scatter()
- ( ) axhline()

7. Suppose you have a DataFrame - **data**, which contains columns 'Open', 'High', 'Low', 'Close', 'Adj Close' and 'Volume'. 1 point

What does **data[['Open', 'Low']]** return?

- (•) Columns 'Open' and 'Low'
- ( ) The first row of data which contains only columns 'Open' and 'High'
- ( ) All columns of data except 'Open' and 'High'
- ( ) No results are shown

8. Suppose you have a DataFrame **ms** , which contains the daily data of 'Open', 'High', 'Low', 'Close', 'Adj Close' and 'Volume' of Microsoft's stock. 1 point

Which of the following syntax calculates the Price difference, (ie 'Close' of tomorrow – 'Close' of today)?

( )
```
1  ms['Close'].shift(1) - ms['Close'].shift(1)
```

( )
```
1  ms['Close'].shift(1) - ms['Close']
```

(•)
```
1  ms['Close'].shift(-1) - ms['Close']
```

( )
```
1  ms['Close'].shift(-1) - ms['Close'].shift(-1)
```

9. Suppose you have a DataFrame - **ms** , which contains the daily data of 'Open', 'High', 'Low', 'Close', 'Adj Close' and 'Volumn' of Microsoft's stock. 1 point

What is the method of DataFrame to calculate the 60 days moving average?

- ( ) moving_average(60)
- ( ) rolling(60).median()
- (•) rolling(60).mean()
- ( ) rolling().mean(60)

10. Which of the following idea(s) is/are correct to the simple trading strategy that we introduced in the lecture video? 1 point

- [x] If **fast signal** is larger than **slow signal**, this indicates an upward trend at the current moment

- [x] Use longer
  moving average as **slow signal** and shorter moving average as **fast signal**
- [ ] We short
  one share of stocks if **fast signal** is larger than **slow signal**