**Python data analysis and application**

1. What are the six comparison operators?

2. Briefly describe the similarities and differences between tuples and lists.

3. How to define a function? What are the types of function parameters in Python?

4. Please write the regular expression that can match 163 email (@163.com).

5. Please briefly describe the characteristics of object-oriented programming.

6. What are the forms of Python exception handling structure.

7. What is the difference between a binary file and a text file?

8. How to read the text from PDF, Word, CSV and JSON file separately?

9. A brief introduction to supervised learning and unsupervised learning.

10. Please briefly introduce the k-means algorithm.