## **0. Can you come up out 3 sceneraies which use AI methods?**

Ans: Intelligent robot customer service, face recognition payment, intelligent speaker.

#### **1. How do we use Github; Why do we use Jupyter and Pycharm;**

**Ans:** first, we need to set up account and, later, create our first repository. Second, we need to download the Git and install it. Step three, set up Git. Step four, we can actually use Github. Wo are going to reate a respository. When reating a respository wu have a few things to decide including ti’s name and where it’ll be publicly accessible or not. Finally, we can send files to Github.

Jupyter preferred to be interactive, more visibility, and easy to read.

Pycharm ofen used to practical projects.

#### **2. What's the Probability Model?**

Ans:Throught a large number of the occurrence of existing events, and then infer the uncertainty of this matter.

#### **3. Can you came up with some sceneraies at which we could use Probability Model?**

Ans: quantitative trading of securities, machine transiation...

#### **4. Why do we use probability and what's the difficult points for programming based on parsing and pattern match?**

Ans: Using prbability, we can calculate the likelihood of some proposition and to meet the need of intelligence.

#### **5. What's the Language Model;**

Ans: Language model can estimate the propobility of a text and play an impotant role in information retrieval, machine trainsiation and other tasks.

#### **6. Can you came up with some sceneraies at which we could use Language Model?**

Ans: machine translation, speech recognition

#### **7. What's the 1-gram language model;**

Ans:

#### **8. What's the disadvantages and advantages of 1-gram language model;**

Ans: The probability of the occurrence of each wold is independent.

P(S) = P(W1,W2,W3,…,Wn)=P(W1)P(W2|W1)P(W3|W1,W2)…P(Wn|W1W2…Wn-1)  
 ≈P(W1)P(W2)P(W3)…P(Wi))...P(Wn)

#### **9. What't the 2-gram models;**

Ans: If the probability of a wold’s occurrence is only related to a word that appears before it, then wu call it 2-gram models

P(S) = P(W1,W2,W3,…,Wn)=P(W1)P(W2|W1)P(W3|W1,W2)…P(Wn|W1W2…Wn-1)  
 ≈P(W1)P(W2|W1)P(W3|W2)…P(Wi)|P(Wi-1)...P(Wn|Wn-1)