Task Description:

1. Read papers about reinforcement learning, ~~Multi-agent negotiation~~, ~~traditional method and machine learning method in the field of Multi-agent~~ and autonomous negotiation. Understand the ~~knowledge of~~ Negotiation Mechanisms supply chain ~~history~~, ~~game theory.~~
2. Understand the code structure and logic of Negmas ~~Simulator~~.
3. Develop a specific environment based on gym to decouple the Negmas simulator and deep reinforcement learning algorithm in order to facilitate the development of ~~algorithm~~.
4. Design a negotiation-agent~~(~~Acceptance Strategy~~)~~ based on Deep Q-Value Network(DQN) algorithm in the developed specific environment. and a ~~Negotiation Agent(Offer/~~bidding strategy~~)~~ based on PPO1 algorithm in the developed ~~specific~~ environment.
5. Based on ~~above~~ developed ~~special~~ environment, expand a new environment for the development of intelligent agents in supply chain management.
6. Implement a supply chain management agent based on deep reinforcement learning ~~method~~.
7. Evaluate the result, compare ~~my~~ agent with others agents built-in Negmas and SCML. Summarize the completed work, areas that can be improved in the future.

Signature: _____

KIT Supervisor: _____

AIST Supervisor: _____