#### Plan

[Done, 9/12] Topic selection

[Done, 10/10] Read through the article and learn related knowledge points (concepts, related algorithms, and implementation)

[Done, 11/5] Complete the first draft

[In progress, 11/10] Experiment+optimization

[11/17] Complete report

[11/28] Presentation and Final report

# Structure of the paper and Progress

### 1) Introduction

Usage field

Introduces the traditional method(the Inclusion Dependencies,INDs) and the problems encountered(based on clean data), and proposes a new method(similarity, sINDs) to solve the problem.

### 2) Summary of the Paper

3 section:

#### 2.1

Introduction to the concepts of INDs and sINDs

#### 2.2

This section describes how to find sINDs by using the Sawfish algorithm. Focus on the implementation process of the three algorithms mentioned in the paper.

2 algorithm for validate the sIND candidates:

Algorithm 1 Index Probing in ED mode

Algorithm 2 Index Probing in JAC mode

an algorithm for sIND Discovery:

Algorithm 3 Candidate Validation

Explain the experiments and comparative methods mentioned in the article

## 3) Analysis and Critique

Comment on the article, briefly describing the contribution and shortcomings of the article

### 4) Conclusion

Brief description
Suggestions for further research directions

# **Achievement**

The first draft of the conceptual section in the report has been completed

## **Problems Encountered**

# **Next Steps**

Replicate the experiment using the test data in the article and compare the test results Final report