# 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

### 2.3

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

# 文章结构及完成情况

1、介绍传统模式 及遇到的问题，论文提出新模式来解决此问题

2、INDs和sINDs的基本概念介绍

3、介绍通过Sawfish算法如何查找到sINDs， 重点举例讲解了论文中提到的3个算法的实现过程

4、讲解下文章中提到的实验和对比方法

# 文章分析和评价

对文章做评价，简述文章的贡献 及 不足的地方

# 总结

全文简述 并提出可继续研究方向

# 下一步计划

使用文章中测试数据复刻实验，对比测试结果