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Algorithm & Data Structure

Final Project

**Space Mining**

Section 5 Group 518

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# Abstract

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# Introduction

# Method

### Genotype

### In the project, Genotype is assumed to be a String of thirty chars. The value of each char is randomly generated to be either ‘0’ or ‘1’.

### Phenotype

### Penotype is assumed to be a String of thirty chars. The value of each char is randomly generated to be either ‘0’ or ‘1’.

将基因平均分为3段，将每一段经过计算转为十进制，每一段分别表示一个性状，反应为坐标位置

### Fitness

距离（d）计算根号下距离公式

信号强弱 fitness = d\*d/R;

### Selection

使用原理: Tournament Selection

<http://developer.51cto.com/art/201709/552326.htm>

### Crossover

### Mutation

按照概率，随机将一个基因片段随机变化 e.g.

# Result and Discussion

# Conclusion