## Artificial Intelligent Repost

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## 1. Chromosome Decoding

For chromosome decoding I used binary encoding just like the slide with 15 bits data for initial population, also I use the first option(data\_latih\_opsi\_1.csv and data\_uji\_opsi\_1.csv) for the read data

## 2. Fitness Calculation

For fitness calculation, I use the maximize accuracy. First find the error, then the total data minus the error data divide by total data.

## 3. Parent Selection Scheme

For parent selection, I used tournament selection. With two chosen parents.

#### Crossover

For crossover I used the technique same as the slide. First, take 2 points from both parents, then choose for the largest range. And swap the largest one to the first data of the array. After that we find the gap between the rule and the rightest point. Then I get the point for the left side and the right side If possible. If not then just using the first point and crossover just like always. The probability of Crossover is 0.2.

## 5. Mutation

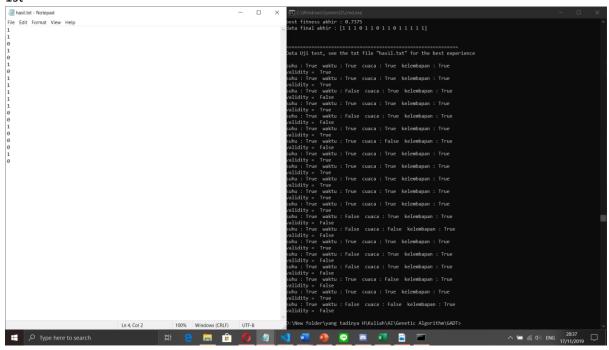
For mutation, first we search for a random population with value 0/1. Then if the mutation happened, I compared my parents data, with that random data. When the parents data and the random data has the same value is 1 and 1 then the parents value is changed into 0. And so on until the data is all compared.

# 6. Generation changes

For the generation changes, I used steady state, which this method is to find the worst fitness value, and replace it with the chosen value. That's why I didn't use that many generation looping and big populations.

#### Screenshot

## 1st



## 2<sup>nd</sup>

