

REPORT: GENETIC ALGORITHM

Step 1:

In the first step randomly the population is created

Step 2:

A tournament is applied to the population where groups of 5 schedules are randomly made and each one of them is sent to a penalty checker function. The penalty checker function checks for clashes and multiplies the number of students that have clash by 100 and adds it to the penalty furthermore it adds to the penalty if two courses are given the same hall at the same time resulting in high penalty

Step 3:

Now we must do cross over. For cross over we are using 80% probability and in this probability a crossover point is chosen and this point is then used to make 2 children which are added to the population. The parents however are not added to the population.

Step 4:

In this step we have mutation. We mutate using 10 percent probability and change either the date or time if the probability falls on that.