1. Initialize the population: We generate population P is the set of 𝜋 indiviuals. The chromosome is represented by a list of G array with the size is Zg. In gth array contains index of Zg member chosen to group g.
2. Fitness function: Usiing compromise Euclϕϕidean distance:

p.fitness=

1. Selection : We choose ϕ elite individuals and keep them in the next generation
2. Crossover: Create a new solution by parents’ chromosomes with crossover rate µ following steps below:

* Step 1: Select randomly 2 individuals as parents denoted by
* Step 2: Get all arrays from parents and join into a new set- remove the duplicate member
* Step 3: Create randomly a new solution by set of elements

1. .We select randomly some individuals with mutation rate by replace that individuals by a totally new one randomly. But there are some solution will not be mutated with No-Mutation rate £