Kiran Girish

Period 4

05/13/16

Size N = 57

Fitness: 0

Generations: 475

Time: 18.362491 seconds

Solution

5, 44, 6, 43, 26, 8, 50, 9, 39, 24,

56, 53, 46, 27, 13, 33, 35, 14, 57, 4,

48, 28, 38, 12, 37, 55, 17, 15, 34, 21,

2, 42, 40, 1, 54, 19, 16, 7, 3, 18,

30, 51, 11, 36, 25, 45, 41, 20, 23, 10,

32, 47, 29, 31, 52, 49, 22

**What is your population size?**

My population size is 50.

**How many children do you breed at a pass (is it 1, as in class, or some other scheme)?**

I breed 25 children at a pass.

**How do you select the parents to breed?**

I select the parents by choosing a random number between 0 and 25 and another random number between 0 and 25 so my parents are preferred to have a better fitness. I use these two numbers as index 1 and index 2 of the list of my boards, making sure they aren’t the same.

**How do you select the pivot point (for the gene splicing)?**

I select a random number between 0 and N.

**How do you decide when to mutate?**

I decide to mutate if a random number between 0 and 10,000 is greater than 5,000.

**What is your mutation?**

My mutation is a swap between two random indices in my board.

**What happens if a child is produced that is identical to an already existing population member?**

I add it regardless if it is a repeat.

**What happens if the two parents selected have the same genes?**

If the parents have the same genes, I chose a different parent to mate with the initial parent to ensure variety by choosing another random index.

**(If relevant) What is your derived fitness function and how are you using it? N/A**