Name Siarhei Piashko (Сергей Пешко)

Chromosomes — 40
Genes — 64
Epoch – 50;
Mutation — 0.01;
Onepoint crossover;
Tournament selection;

One of the games from initial population:

D (defect) — 0
C (cooperate) -1

P1:
DDDCCDCCDDDCCCDCDDDCCDDDCDDCCCCDDCDDCCCCDCCDCDCDCCDCCCCD
DDDCDCC - (64)
P2:DDDCCDCCDDDCCCDCDDDCCDDDCDDCCCCDDCDDCCCCDCCDCDCDCCDCCCC
DDDDCDCC - (64)
itration: 0
CC (P1 choice C, P2 choice C)
itration: 1
DD
itration: 2
DD
itration: 3
DD
itration: 4
CC
itration: 5
CC
itration: 6
DD
itration: 7
CC
itration: 8
CC
itration: 9
DD

P1Score: 20
P2Score: 20

As result P1 and P2 get +1 to theirs fitness

One of the games from population in middle (25):

D (defect) — 0
C (cooperate) -1

P1:DDDCCDCCDDDCCCDCDDDCCDDDCDDCCCCDDCDDCCCCDCCDCDCDCCDCCCC
DDDDCDCC - 64

P2:DDCDDCCCCDDDDCCDDCCCCDDCCCDDDCDDDCCCCCDDDCDCDDCDDDCDCDD
CDCCCDCDC - 64
itration: 0
CD (P1 choice C, P2 choice D)
itration: 1
DD
itration: 2
DC
itration: 3
CD
itration: 4
DD
itration: 5
CD
itration: 6
CC
itration: 7
CD
itration: 8
DC
itration: 9
CD

P1Score: 15
P2Score: 30

As result P2 get +1 to theirs fitness

One of the games from population in the end (50):

P1:DCDCDCCDCCDCDDDDCDCDCDDDDDCDCDCCCCDDCCCDCDDCCCCDCDDCDCD
CDDDDDCDD
P2:CCCDCCCCDDDCCCCDDCDDCCCDDCCDCDCCDCCDDCCDDCDCDCDCCDCDCCCD
CCDDDCDD
itration: 0
DD (P1 choice D, P2 choice D)
itration: 1
CC
itration: 2
CC
itration: 3
CC
itration: 4
DC
itration: 5
DC
itration: 6
DC
itration: 7
DC
itration: 8

DC
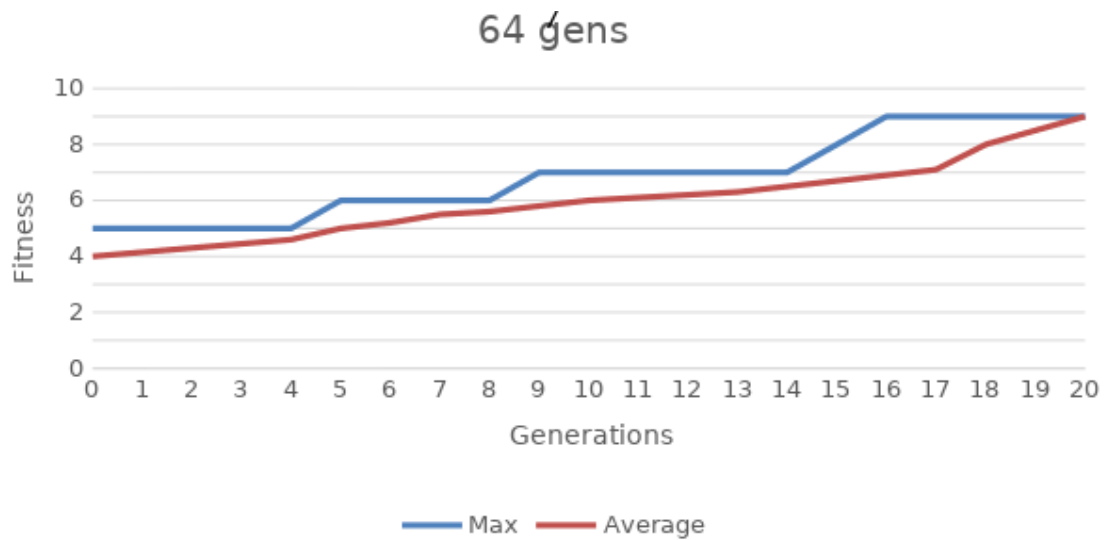itration: 9
DC

P1Score: 40
P2Score: 10

As result P1 get +1 to theirs fitness

Final the best result:
CCCDCDDDCDDCDDDCDCDCCCCCCCDDDDCCDCDCCDCDCCCCCDCDCCCCCDCCC
DDDCDD

After 20 nothing is changing so it dosent metter show all

Concludions: The completed work has accomplished its goals. The Prisoner's Dilemma problem has been examined and strategies to successfully play the game have been evolved. Above have been analysed and proven to display the characteristics necessary to play the Prisoner's Dilemma successfully.