Instituto Politécnico Nacional
Unidad Profesional Interdisiplinaria de Ingenierias campus Zacatecas

Analicis de Álgoritmos

Algoritmos Geneticos

Olando Odiseo Belmonte Flores

Maestro:
Roberto Oswaldo Cruz Leija

November 29, 2019

n = 8
prueba 1 =>
  conf(10000, 10, 0.2, 0.1)
  g: 63 f:0 id:153962735
  g: 63 [4, 1, 3, 5, 7, 2, 0, 6]

prueba 2 =>
  conf(25000, 19, 0.3, 0.09)
  g: 16 f:0 id:1442562997
  g: 16 [0, 4, 7, 5, 2, 6, 1, 3]

prueba 3 =>
  conf(2500, 19, 0.3, 0.11,)
  g: 509 f:0 id:1383775898
  g: 509 [2, 5, 1, 6, 4, 0, 7, 3]

n = 16
prueba 1 =>
  conf(30000, 25, 0.2, 0.01)
  g: 643 f:0 id:1442562997
  g: 643 [5, 1, 4, 9, 7, 12, 14, 3, 0, 13, 8, 2, 11, 6, 15, 10]

prueba 2 =>
  conf(10000, 20, 0.3, 0.01)
  g: 541 f:0 id:1442562997
  g: 541 [11, 14, 8, 10, 4, 1, 3, 0, 12, 7, 9, 13, 2, 5, 15, 6]

prueba 3 =>
  conf(90000, 50, 0.25, 0.03)
  g: 1734 f:0 id:261433591
  g: 1734 [8, 3, 12, 15, 13, 4, 7, 5, 14, 1, 10, 0, 9, 6, 2, 11]

n = 30
prueba 1 =>
  conf(50000, 5, 0.2, 0.1)
  g: 26051 f:0 id:261433591
  g: 26051 [18, 11, 17, 8, 3, 19, 29, 15, 28, 6, 27, 2, 21, 16, 25, 10, 14, 9, 5, 23, 1, 7, 22, 24, 26, 13, 20, 0, 4, 12]

prueba 2 =>
  conf(35000, 12, 0.2, 0.07)
  g: 5668 f:0 id:153962735
  g: 5668 [4, 7, 9, 21, 27, 14, 0, 19, 8, 23, 13, 24, 29, 2, 25, 10, 1, 3, 15, 11, 18, 22, 5, 28, 26, 12, 16, 20, 6, 17]

prueba 3 =>
  conf(75000, 8, 0.2, 0.035)

g: 24610 f:0 id:261433591

g: 24610 [0, 22, 14, 16, 21, 19, 29, 13, 26, 5, 12, 4, 1, 8, 23, 25, 20, 24, 10, 27, 18, 6, 9, 28, 2, 7, 17, 3, 11, 15]

n = 70
prueba 1 =>
  conf(90000, 13, 0.2, 0.072)
  g: 19519 f:0 id:1442562997
  g: 19519 [1, 42, 40, 46, 37, 25, 16, 41, 11, 56, 14, 55, 47, 64, 32, 23, 53, 45, 18, 59, 12, 51, 13, 48, 50, 61, 21, 33, 57, 44, 69, 2, 26, 19, 30, 54, 9, 17, 6, 36, 15, 43, 8, 66, 68, 58, 60, 34, 5, 31, 20, 0, 24, 4, 7, 38, 67, 62, 10, 28, 3, 35, 52, 39, 63, 27, 22, 65, 49, 29]

prueba 2 =>
  conf(60000, 22, 0.3, 0.019)
  g: 27742 f:0 id:261433591
  g: 27742 [6, 62, 38, 44, 17, 61, 11, 34, 23, 37, 9, 1, 36, 51, 31, 66, 60, 67, 25, 58, 29, 4, 40, 27, 49, 45, 48, 2, 26, 50, 41, 57, 5, 47, 19, 24, 55, 32, 30, 33, 69, 15, 10, 14, 7, 22, 54, 8, 13, 59, 53, 35, 68, 12, 56, 3, 43, 39, 20, 16, 0, 28, 42, 63, 65, 18, 52, 46, 64, 21]

prueva 3 =>
  conf(100000, 100, 0.3, 0.02)
  g: 95048 f:0 id:261433591
  g: 95048 [21, 47, 59, 3, 0, 38, 40, 50, 36, 62, 60, 19, 23, 20, 45, 41, 34, 5, 24, 68, 33, 30, 14, 1, 15, 6, 48, 39, 66, 12, 65, 61, 46, 69, 11, 29, 52, 54, 25, 43, 7, 44, 37, 67, 63, 9, 35, 18, 49, 64, 26, 53, 8, 27, 4, 17, 13, 55, 42, 56, 2, 16, 31, 10, 22, 58, 51, 57, 28, 32]

n = 90 – para 90 reinas no se encontró una configuración con solución así que se colocaron configuraciones con sus mejores resultados y la generación de cambio
prueba 1 =>
  conf(10000, 200, 0.2, 0.00001)
  4928 f:2 id:153962735

prueba 2 =>
  conf(10000, 50, 0.2, 0.00001)
  g: 4116 f:4 id:1515277743

prueba 3 =>
  conf(12000, 10, 0.2, 0.015)
  45845 f:6 id:1383775898