Assignment-2

Sub: Application of Soft Computing (RCS-071)

1. Determine the maximum value of the function using genetic algorithm where x is permitted to vary between 0 and 31 using a 5 bit binary integer i.e. 0 (00000) and 31 (11111). Initial population of size 4 is given as 01100,11001, 00101, 10011.

2. Find the value of a, b, c that satisfy the given equation i.e. To speed up the computation strict the values of variables a, b, c are integers between 0 and 10. Assume the initial population are 6 i.e.
   P[1]=[a,b,c]=[1,0,2]
   P[2]=[a,b,c]=[2,2,3]
   P[3]=[a,b,c]=[1,4,4]
   P[4]=[a,b,c]=[2,1,6]
   P[5]=[a,b,c]=[1,4,9]
   P[6]=[a,b,c]=[2,5,2]
   Use Roulette Wheel as a selection scheme.