Assignment 3

1. Find the optimal value of the Sphere function with four (4) variables using Binary-Coded GA.

$$\min f(x) = \sum_{i=1}^{4} x_i^2$$

$$where, x_i \in [-10,10] \ \forall i$$

2. Solve the GAP problem using a Binary-Coded GA and compare the results with
   a. Optimal
   b. Approximation

   Also, plot a graph representing the convergence of fitness value over 100 iterations for GAP12.