# PARTICLE SWARM OPTIMIZATION EXECUTION STEPS

In the particle swarm optimization problem, the customization section has been marked to lead customization and test the program for various user-defined test cases.

Dependencies involved:
- random
- math
- matplotlib.pyplot
- NumPy

Above mentioned are the dependencies involved for the program to run effectively.

In the customization section, the following variables can be modified:
- nv (Number of Variables)
- mm (If Maximization problem, mm = 1 for the minimization problem, mm = -1)
- c1 (cognitive constant)
- c2 (social constant)
- w (inertia constant)
- particle size
- iterations

The variables mentioned above can be modified to test the program on different test cases. For the problem, the format to enter the objective function has also been mentioned. Post the customization section, the PSO algorithm begins.

The output for the same on one of the test-case has been attached in **"Assignment8_ME 8710_Output.pdf."**