

## Homework 24 ( Genetic algorithms).

You are provided with full documentation of the genetical algorithm in a readme file providing full documentation of the code ga170.f First read all documentation provided carefully.

The full material is available in a tar file which you untar in a directory called ga.

You will get:

```
ga170.f
ga.inp
ga2.inp (w/ different namelist identifier)
ga.out
ga.restart
params.f
ReadMe
```

Your tasks consist of:

1. Please explain and flowchart the code.
2. Look in the file ga.out and comment on the rate of convergence of the GA algorithm. Part of the output is on the screen. Explain the parameters choices
3. Explain in detail the mechanism of the GA algorithm as implemented in the code.
4. Test the code on the multimodal function supplied and explain why it has multiple maxima and which one has GA algorithm converged to. ( you need to read file func.pdf)
5. Read the tutorial and ReadMe file and summarize your experience.
6. A description of the one dimensional many maxima function maximized is provided in document func.pdf