

1. All submitted files
  - a. Individual.py – This class store random generation of an individual, fitness function of every individual, plus the fitness value itself, etc.
  - b. TSP\_toStudents.py – This file will perform the evolution to new generation it can also be called as Core of the algorithm.
  - c. TSP\_dataset – This the dataset file on which the test results are generated
2. Compiling Environment
  - a. Windows:
    - i. Downloading
      1. Go to <https://www.python.org/>
      2. Click on the link that's says **Latest Python 3 Release - Python 3.x.x**
      3. Scroll down and download 32bit exe file or 64 bit version
      4. Download jetbrain IDE pycharm from <https://www.jetbrains.com/pycharm/>
      - 5.
    - ii. Installing
      1. After Downloading just double click the file(please make sure to ensure that interpreter is placed at your execution path)
  - b. MacOS
    - i. Install Homebrew
    - ii. After installing homebrew Open terminal type below command  
`$ brew install python3`
    - iii. After this go to <https://www.jetbrains.com/pycharm/> and download the ide and setup the environment
    - iv.
3. compiling steps,
  - a. Download the Zip file and place it into appropriate folder
  - b. Open pycharm → Open the TSP\_R00183682 project
  - c. Run TSP\_R00183682.py using terminal by typing below command

**python TSP\_R00183682.py TSP\_dataset/inst-5.tsp 1 0 1 0**

Where , first argument = My data File

Second argument = initialization

Third argument= selection

Fourth argument= crossover

Fifth argument= mutation