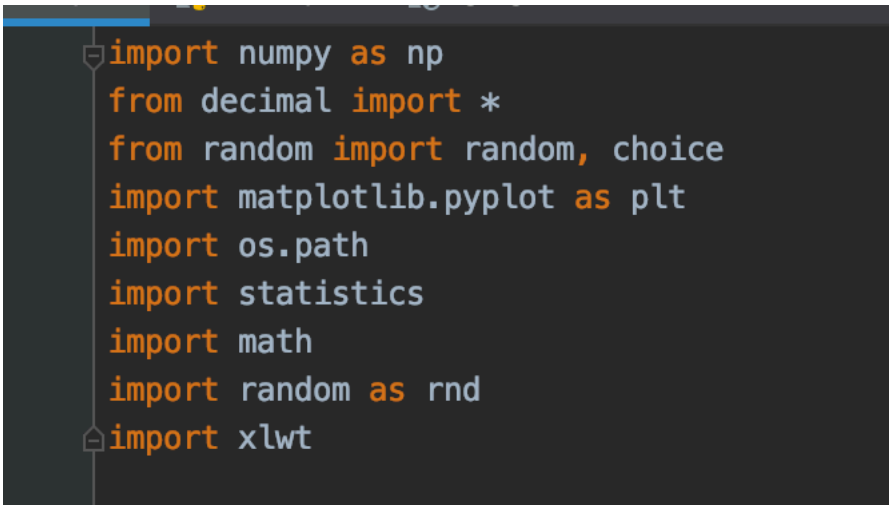
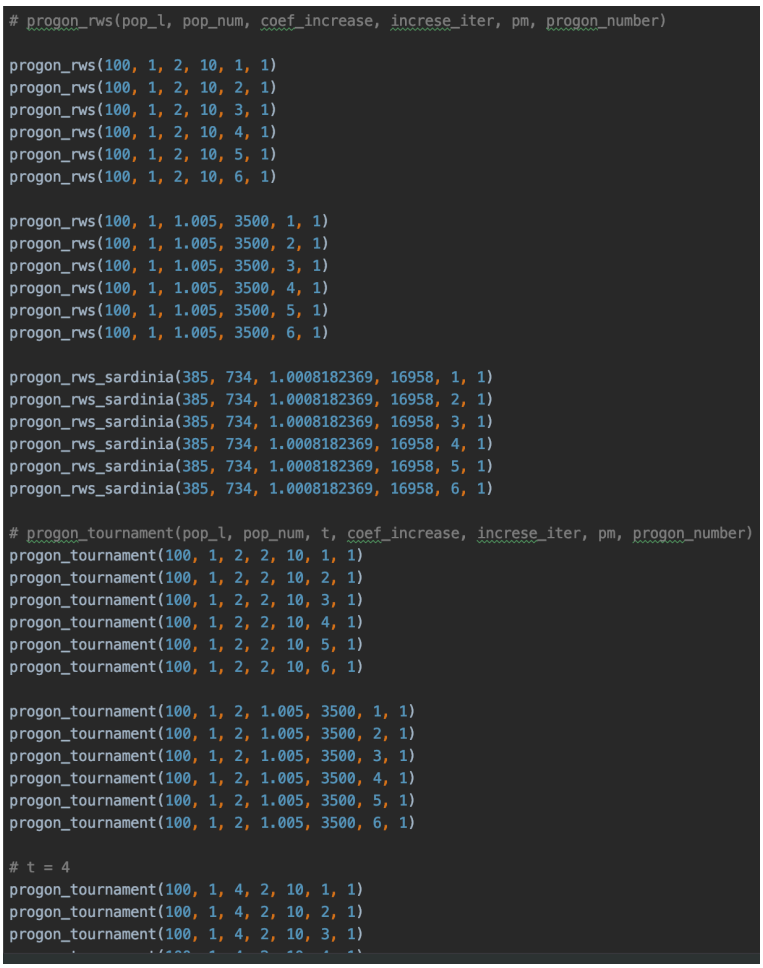
Installation & running tutorial

1. Install Python **v3.8.1** “https://www.python.org/downloads/"
2. Enable Write Python to **PATH during installation**
3. **Install all imports on the top of the file (hover on them and click “Install button” from dropdown)**



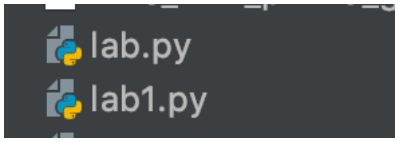
```
import numpy as np
from decimal import *
from random import random, choice
import matplotlib.pyplot as plt
import os.path
import statistics
import math
import random as rnd
import xlwt
```

4. Comment NOT needed parameters (at the end of the file)



```
# progon_rws(pop_l, pop_num, coef_increase, increse_iter, pm, progon_number)

progon_rws(100, 1, 2, 10, 1, 1)
progon_rws(100, 1, 2, 10, 2, 1)
progon_rws(100, 1, 2, 10, 3, 1)
progon_rws(100, 1, 2, 10, 4, 1)
progon_rws(100, 1, 2, 10, 5, 1)
progon_rws(100, 1, 2, 10, 6, 1)

progon_rws(100, 1, 1.005, 3500, 1, 1)
progon_rws(100, 1, 1.005, 3500, 2, 1)
progon_rws(100, 1, 1.005, 3500, 3, 1)
progon_rws(100, 1, 1.005, 3500, 4, 1)
progon_rws(100, 1, 1.005, 3500, 5, 1)
progon_rws(100, 1, 1.005, 3500, 6, 1)

progon_rws_sardinia(385, 734, 1.0008182369, 16958, 1, 1)
progon_rws_sardinia(385, 734, 1.0008182369, 16958, 2, 1)
progon_rws_sardinia(385, 734, 1.0008182369, 16958, 3, 1)
progon_rws_sardinia(385, 734, 1.0008182369, 16958, 4, 1)
progon_rws_sardinia(385, 734, 1.0008182369, 16958, 5, 1)
progon_rws_sardinia(385, 734, 1.0008182369, 16958, 6, 1)

# progon_tournament(pop_l, pop_num, t, coef_increase, increse_iter, pm, progon_number)
progon_tournament(100, 1, 2, 2, 10, 1, 1)
progon_tournament(100, 1, 2, 2, 10, 2, 1)
progon_tournament(100, 1, 2, 2, 10, 3, 1)
progon_tournament(100, 1, 2, 2, 10, 4, 1)
progon_tournament(100, 1, 2, 2, 10, 5, 1)
progon_tournament(100, 1, 2, 2, 10, 6, 1)

progon_tournament(100, 1, 2, 1.005, 3500, 1, 1)
progon_tournament(100, 1, 2, 1.005, 3500, 2, 1)
progon_tournament(100, 1, 2, 1.005, 3500, 3, 1)
progon_tournament(100, 1, 2, 1.005, 3500, 4, 1)
progon_tournament(100, 1, 2, 1.005, 3500, 5, 1)
progon_tournament(100, 1, 2, 1.005, 3500, 6, 1)

# t = 4
progon_tournament(100, 1, 4, 2, 10, 1, 1)
progon_tournament(100, 1, 4, 2, 10, 2, 1)
progon_tournament(100, 1, 4, 2, 10, 3, 1)
```

5. There are two .py files (lab.py - for l>=100) & (lab1.py - for l<100)



6. Run project (PAY ATTENTION to which file is running)