File - C:\Users\geoff\Desktop\FlyOx Concept\Python\pandas\aircrafttypeAI.py

```
1 # coding: utf-8
2 __author__ = 'Geoffrey Nyaga'
4 import sys
5 sys.path.append('../')
6 from API.db API import write to db, read from db
7 from API.aircrafttypeAPI import aircraft_type
9 import numpy as np
10 from sklearn import tree
11 import pandas as pd
12 \text{ import} random
13
14 """
15 this is my code
16
17 """
18
19 aircraft_categories = ["LSA", "Sailplanes", "GA"]
20
21 mydict = [read_from_db('finalMTOW'), read_from_db('emptyWeight'), read_from_db('S')*10.76 , read_from_db(
  'wingSpan')]
22
23 number_of_aircraft = 5000
24
25 def fin():
26
     return_matrixx = []
27
      for x in range(21):
28
          c = aircraft_type(number_of_aircraft,mydict)
29
          return_matrixx.append(c)
30
     return (np.bincount(return_matrixx).argmax())
31
32 output matrix = []
33
34 for iteration in range(9):
35
     print ('calculating step', iteration)
36
      iteration = fin()
37
      output_matrix.append(iteration)
38
39 # print(output_matrix,"pheeeew")
40 index = np.bincount(output_matrix).argmax()
41 # print(index,"my index")
42 aircraft_type = aircraft_categories[index]
43 print("the aircraft type is:", aircraft type," and YEEEEH!!! I finally i made it!!!!!!")
44
45
46
47
```