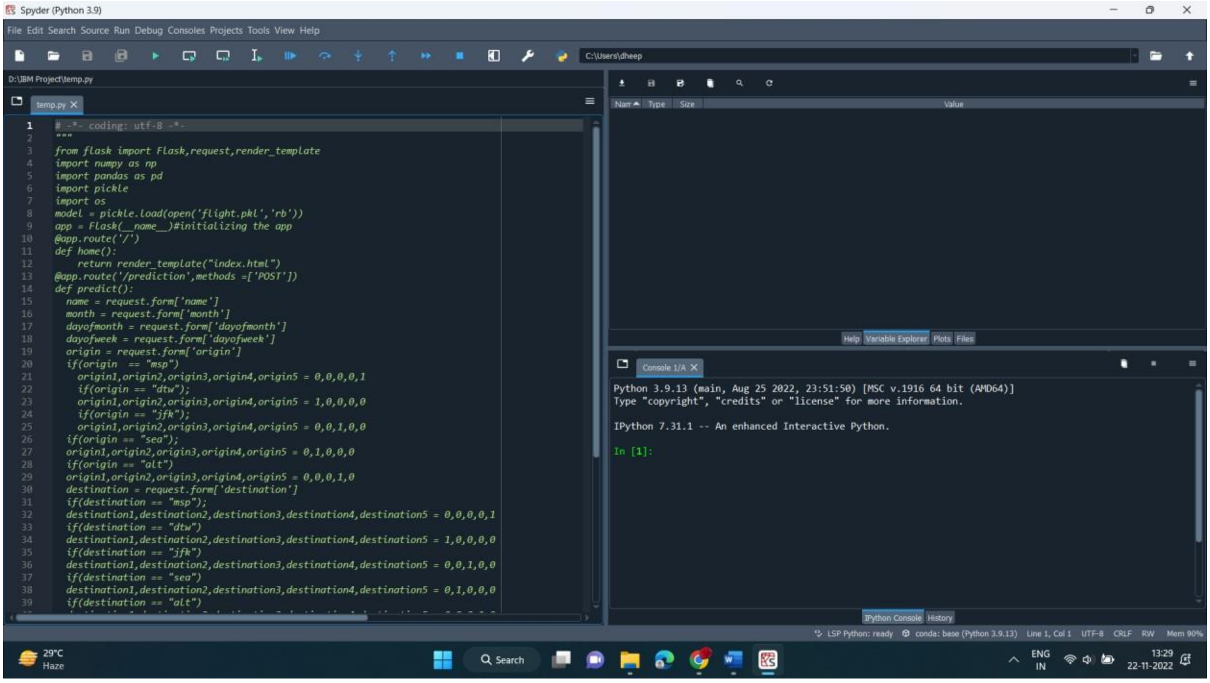
INTEGRATE FLASK WITH SCORING END POINT

DATE	01 NOVEMBER 2022
TEAM ID	PNT2022TMID27775
PROJECT NAME	DEVELOPING A FLIGHT DELAY PREDICTION MODEL BY USING MACHINE LEARNING

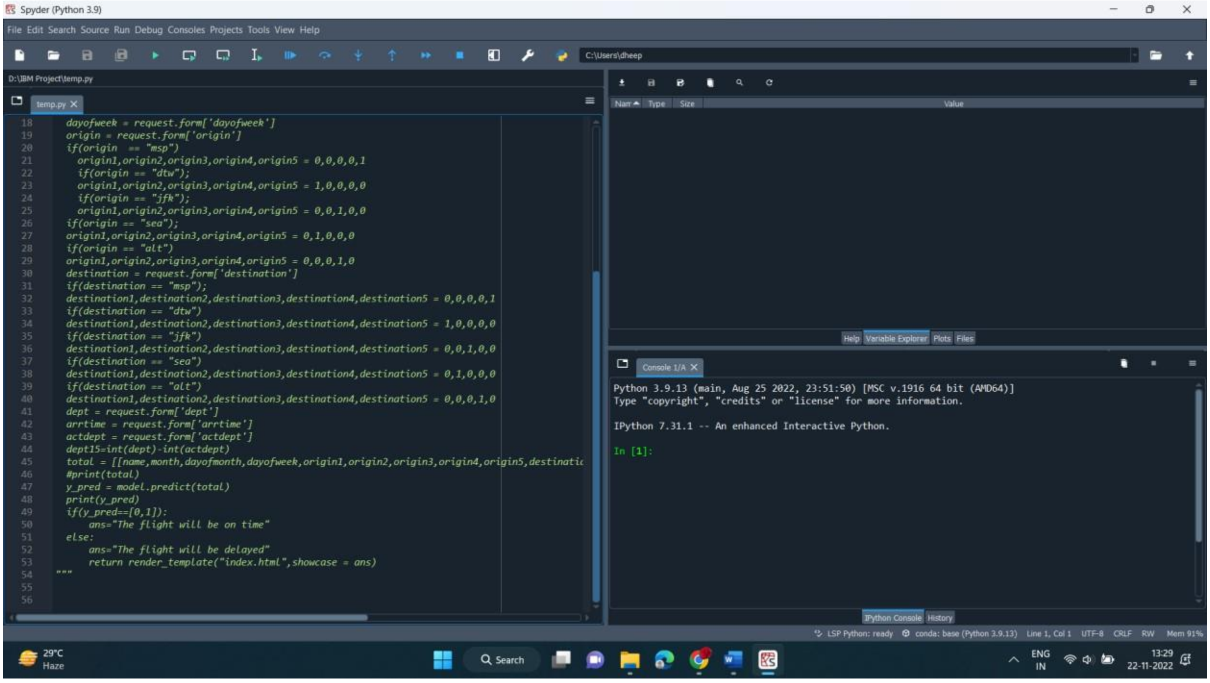


```
# -*- coding: utf-8 -*-
"""
from flask import Flask,request,render_template
import numpy as np
import pandas as pd
import pickle
import os
model = pickle.load(open('flight.pkl','rb'))
app = Flask(__name__)#initializing the app
@app.route('/')
def home():
    return render_template("index.html")
@app.route('/prediction',methods =['POST'])
def predict():
  name = request.form['name']
  month = request.form['month']
  dayofmonth = request.form['dayofmonth']
  dayofweek = request.form['dayofweek']
  origin = request.form['origin']
  if(origin  == "msp")
    origin1,origin2,origin3,origin4,origin5 = 0,0,0,0,1
    if(origin == "dtw");
    origin1,origin2,origin3,origin4,origin5 = 1,0,0,0,0
    if(origin == "jfk");
    origin1,origin2,origin3,origin4,origin5 = 0,0,1,0,0
  if(origin == "sea");
  origin1,origin2,origin3,origin4,origin5 = 0,1,0,0,0
  if(origin == "alt")
  origin1,origin2,origin3,origin4,origin5 = 0,0,0,1,0
  destination = request.form['destination']
  if(destination == "msp");
  destination1,destination2,destination3,destination4,destination5 = 0,0,0,0,1
  if(destination == "dtw")
  destination1,destination2,destination3,destination4,destination5 = 1,0,0,0,0
  if(destination == "jfk")
  destination1,destination2,destination3,destination4,destination5 = 0,0,1,0,0
  if(destination == "sea")
  destination1,destination2,destination3,destination4,destination5 = 0,1,0,0,0
  if(destination == "alt")
```

```
Python 3.9.13 (main, Aug 25 2022, 23:51:50) [MSC v.1916 64 bit (AMD64)]
Type "copyright", "credits" or "license" for more information.

IPython 7.31.1 -- An enhanced Interactive Python.

In [1]:
```



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```
        dayofweek = request.form['dayofweek']
        origin = request.form['origin']
        if(origin  == "msp")
          origin1,origin2,origin3,origin4,origin5 = 0,0,0,0,1
          if(origin == "dtw");
          origin1,origin2,origin3,origin4,origin5 = 1,0,0,0,0
          if(origin == "jfk");
          origin1,origin2,origin3,origin4,origin5 = 0,0,1,0,0
        if(origin == "sea");
        origin1,origin2,origin3,origin4,origin5 = 0,1,0,0,0
        if(origin == "alt")
        origin1,origin2,origin3,origin4,origin5 = 0,0,0,1,0
        destination = request.form['destination']
        if(destination == "msp");
        destination1,destination2,destination3,destination4,destination5 = 0,0,0,0,1
        if(destination == "dtw")
        destination1,destination2,destination3,destination4,destination5 = 1,0,0,0,0
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        destination1,destination2,destination3,destination4,destination5 = 0,0,1,0,0
        if(destination == "sea")
        destination1,destination2,destination3,destination4,destination5 = 0,1,0,0,0
        if(destination == "alt")
        destination1,destination2,destination3,destination4,destination5 = 0,0,0,1,0
        dept = request.form['dept']
        arrtime = request.form['arrtime']
        actdept = request.form['actdept']
        dept15=int(dept)-int(actdept)
        total = [[name,month,dayofmonth,dayofweek,origin1,origin2,origin3,origin4,origin5,destinatic
        #print(total)
        y_pred = model.predict(total)
        print(y_pred)
        if(y_pred==[0,1]):
            ans="The flight will be on time"
        else:
            ans="The flight will be delayed"
            return render_template("index.html",showcase = ans)
      """
```

```
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In [1]:
```

def

home():

return render_template(‘index.html’) def

y_predict():

geography = request.form(“geography”)

gender= request.form(“gender”) age=

request.form(“age”) tenure=

request.form(“tenure”) creditscore=

request.form(“creditscore”) balance=

request.form(“balance”) noof =

request.form[“no of”]

hascreditcard = request.form{“has credit card”] isactivemember

= request.form{“isactivemember”] estimatedsalary =

request.form[“estimated salary”] if(geography == “Spain”):

s1,s2,s3 = 0,0,1 if(geography

== “Germany”):

s1,s2,s3 = 0,1,0
if(geography == “Newyork”):

```
s1,s2,s3 = 0,1,0 if(gender

==”female”):

gender = 0 if(gender

== “male”):

gender = 1 if(isactivemember

== “no”):

isactivemember = 0

if(isactivemember == “yes”):

isactivemember = 1

if(hascreditcard == “no”):

hascreditcard = 0 if(hascreditcard

== “yes”):

hascreditcard = 1

t=[[int(s1),int(s2),int(s3),int(creditscore),int(gender),int(age),int(tenure),int(balance),int(noof)
,int(hascreditcard),int(isactivemember),int(estimatedsalary)]] print(t)

payload_scoring                                                                                    =
(“input_data”:[{“field”:[[“G1”,”G2”,”G3”,”CreditScore”,”Gender”,”Age”,”Tenure”,”Balance
”,”numofproducts”,”HasCrCard”,”IsActiveMember”)

print(“Scoring response’) predictions =

response_scoring.json() print(predictions)

pred = predictions[‘predictions’][0][‘values’][0][0] if(pred

== 0):

output = “he will not get excited”

print(“ he will not get excited”)

else:

output = “he gets excited”

print(“he gets excited”)

return render_template(“index.html’,prediction_text=output)
if_name_ == “_main_”:

app.run(debug=True)
```