```
!pip install flask ngrok
     Requirement already satisfied: flask ngrok in /usr/local/lib/python3.10/dist-packages (0.0.25)
     Requirement already satisfied: Flask>=0.8 in /usr/local/lib/python3.10/dist-packages (from flask ngrok) (2.2.5)
     Requirement already satisfied: requests in /usr/local/lib/python3.10/dist-packages (from flask ngrok) (2.31.0)
     Requirement already satisfied: Werkzeug>=2.2.2 in /usr/local/lib/python3.10/dist-packages (from Flask>=0.8->flask_ngrok) (3.0.1)
     Requirement already satisfied: Jinja2>=3.0 in /usr/local/lib/python3.10/dist-packages (from Flask>=0.8->flask ngrok) (3.1.2)
     Requirement already satisfied: itsdangerous>=2.0 in /usr/local/lib/python3.10/dist-packages (from Flask>=0.8->flask ngrok) (2.1.2)
     Requirement already satisfied: click>=8.0 in /usr/local/lib/python3.10/dist-packages (from Flask>=0.8->flask ngrok) (8.1.7)
     Requirement already satisfied: charset-normalizer<4.>=2 in /usr/local/lib/python3.10/dist-packages (from requests->flask ngrok) (3.3.2)
     Requirement already satisfied: idna<4,>=2.5 in /usr/local/lib/python3.10/dist-packages (from requests->flask ngrok) (3.4)
     Requirement already satisfied: urllib3<3,>=1.21.1 in /usr/local/lib/python3.10/dist-packages (from requests->flask ngrok) (2.0.7)
     Requirement already satisfied: certifi>=2017.4.17 in /usr/local/lib/python3.10/dist-packages (from requests->flask ngrok) (2023.7.22)
     Requirement already satisfied: MarkupSafe>=2.0 in /usr/local/lib/python3.10/dist-packages (from Jinja2>=3.0->Flask>=0.8->Flask ngrok) (2.1.3)
!pip install fastapi nest-asyncio pyngrok uvicorn
     Requirement already satisfied: fastapi in /usr/local/lib/python3.10/dist-packages (0.104.1)
     Requirement already satisfied: nest-asyncio in /usr/local/lib/python3.10/dist-packages (1.5.8)
     Requirement already satisfied: pyngrok in /usr/local/lib/python3.10/dist-packages (7.0.1)
     Requirement already satisfied: uvicorn in /usr/local/lib/python3.10/dist-packages (0.24.0.post1)
     Requirement already satisfied: anyio<4.0.0,>=3.7.1 in /usr/local/lib/python3.10/dist-packages (from fastapi) (3.7.1)
     Requirement already satisfied: pydantic!=1.8,!=1.8.1,!=2.0.0,!=2.0.1,!=2.1.0,<3.0.0,>=1.7.4 in /usr/local/lib/python3.10/dist-packages (from fastapi) (1.10.13)
     Requirement already satisfied: starlette<0.28.0,>=0.27.0 in /usr/local/lib/python3.10/dist-packages (from fastapi) (0.27.0)
     Requirement already satisfied: typing-extensions>=4.8.0 in /usr/local/lib/python3.10/dist-packages (from fastapi) (4.8.0)
     Requirement already satisfied: PyYAML in /usr/local/lib/python3.10/dist-packages (from pyngrok) (6.0.1)
     Requirement already satisfied: click>=7.0 in /usr/local/lib/python3.10/dist-packages (from uvicorn) (8.1.7)
     Requirement already satisfied: h11>=0.8 in /usr/local/lib/python3.10/dist-packages (from uvicorn) (0.14.0)
     Requirement already satisfied: idna>=2.8 in /usr/local/lib/python3.10/dist-packages (from anyio<4.0.0,>=3.7.1->fastapi) (3.4)
     Requirement already satisfied: sniffio>=1.1 in /usr/local/lib/python3.10/dist-packages (from anyio<4.0.0,>=3.7.1->fastapi) (1.3.0)
     Requirement already satisfied: exceptiongroup in /usr/local/lib/python3.10/dist-packages (from anyio<4.0.0,>=3.7.1->fastapi) (1.1.3)
import pandas as pd
from flask ngrok import run with ngrok
from flask import request, jsonify, Flask
import random as rk
from fastapi import FastAPI
import nest asyncio
from pyngrok import ngrok
import uvicorn
app = Flask(__name__)
run with ngrok(app)
```

```
Dados = [{
    'Name': 'Mahesh',
    'Age': 25,
    'City': 'Bangalore',
    'Country': 'India'
       },
    'Name': 'Alex',
    'Age': 26,
    'City': 'London',
    'Country': 'UK'
       },
    'Name': 'David',
    'Age': 27,
    'City': 'San Francisco',
    'Country': 'USA'
         },
    'Name': 'John',
    'Age': 28,
    'City': 'Toronto',
    'Country': 'Canada'
        },
    'Name': 'Chris',
    'Age': 29,
    'City': 'Paris',
    'Country': 'France'}]
@app.route('/')
def home():
 return '<marquee><h3> TO CHECK IN PUT ADD "/INPUT" TO THE URL AND TO CHECK OUT PUT ADD "/OUTPUT" TO THE URL.<h3><marquee>'
@app.route('/input')
def input():
 return jsonify(Dados)
@app.route('/output', methods=['GET', 'POST'])
def predJson():
 pred = r.choice(['positive', 'negative'])
 nd = Dados
 nd['prediction']=pred
  return jsonify(nd)
run_with_ngrok(app)
app.run()
      * Serving Flask app '__main__'
      * Debug mode: off
```

https://colab.research.google.com/drive/1ROy\_a2ymsaPQhkrtF8yaW7H9VLQ1RevF#scrollTo=MjCl2z\_K4SdG&printMode=true

INFO:werkzeug:WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.

INFO:

INFO:

INFO:

INFO:

INFO:

INFO:

4

Shutting down

\* Running on <a href="http://127.0.0.1:5000">http://127.0.0.1:5000</a>
INFO:werkzeug:Press CTRL+C to quit

```
* Traffic stats available on <a href="http://127.0.0.1:4040">http://127.0.0.1:4040</a>
       * Traffic stats available on <a href="http://127.0.0.1:4040">http://127.0.0.1:4040</a>
app = FastAPI()
@app.get('/index')
async def home():
 return Dados
ngrok_tunnel = ngrok.connect(8000)
print('Public URL:', ngrok_tunnel.public_url)
nest asyncio.apply()
uvicorn.run(app, port=8000)
      WARNING:pyngrok.process.ngrok:t=2023-11-23T16:05:33+0000 lvl=warn msg="ngrok config file found at legacy location, move to XDG location" xdg_path=/root/.config/ngrok/ngrok.yml legacy_path=/root/.r
      Public URL: <a href="https://14e1-35-245-31-45.ngrok.io">https://14e1-35-245-31-45.ngrok.io</a>
                 Started server process [7199]
      INFO:
      INFO:
                 Waiting for application startup.
      INFO:
                 Application startup complete.
```

\* Running on http://aab9-35-245-31-45.ngrok.io \* Running on http://aab9-35-245-31-45.ngrok.io

Uvicorn running on http://127.0.0.1:8000 (Press CTRL+C to quit)

168.181.58.0:0 - "GET /favicon.ico HTTP/1.1" 404 Not Found

168.181.58.0:0 - "GET /index HTTP/1.1" 200 OK

Waiting for application shutdown.

Application shutdown complete.

Finished server process [7199]