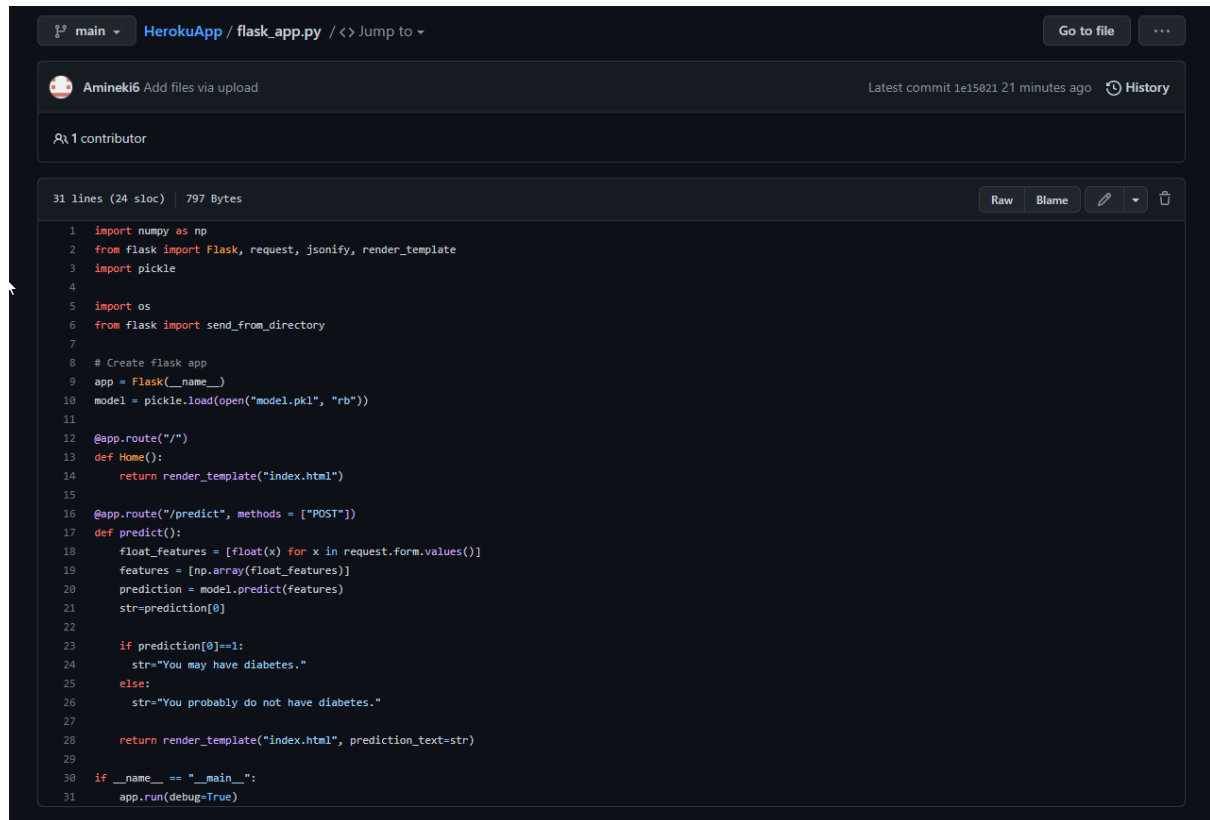


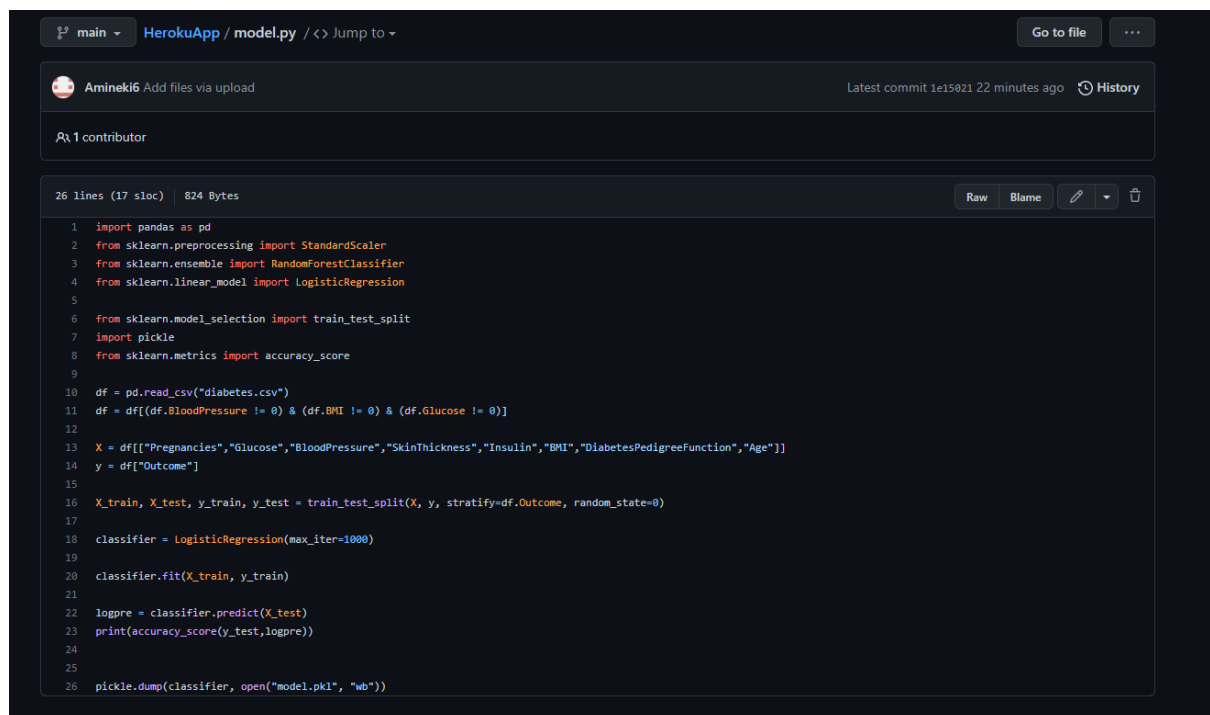
DEPLOYMENT STEPS IN HEROKU:

1. Python App:



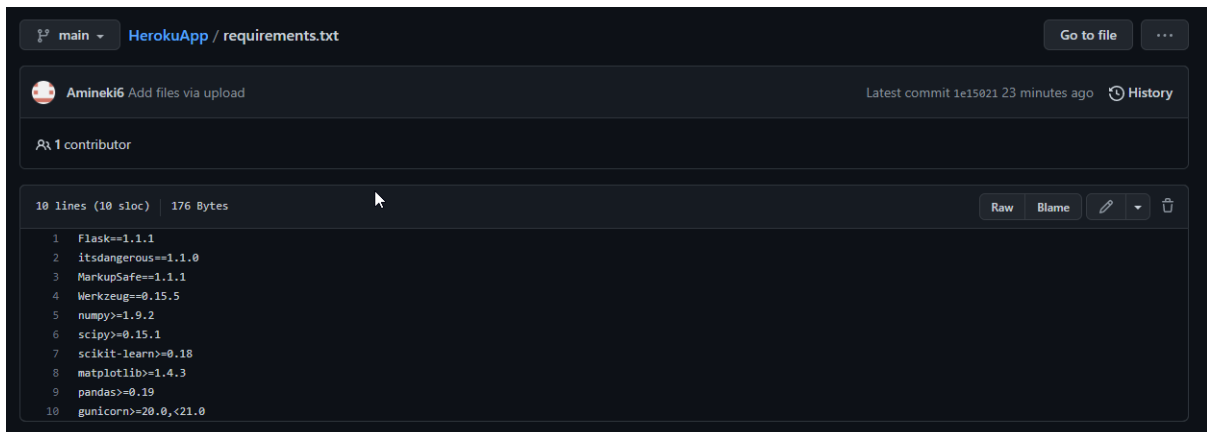
```
1 import numpy as np
2 from flask import Flask, request, jsonify, render_template
3 import pickle
4
5 import os
6 from flask import send_from_directory
7
8 # Create flask app
9 app = Flask(__name__)
10 model = pickle.load(open("model.pkl", "rb"))
11
12 @app.route("/")
13 def Home():
14     return render_template("index.html")
15
16 @app.route("/predict", methods = ["POST"])
17 def predict():
18     float_features = [float(x) for x in request.form.values()]
19     features = np.array(float_features)
20     prediction = model.predict(features)
21     str=prediction[0]
22
23     if prediction[0]==1:
24         str="You may have diabetes."
25     else:
26         str="You probably do not have diabetes."
27
28     return render_template("index.html", prediction_text=str)
29
30 if __name__ == "__main__":
31     app.run(debug=True)
```

2. Train model and Load it in Pickel File:



```
1 import pandas as pd
2 from sklearn.preprocessing import StandardScaler
3 from sklearn.ensemble import RandomForestClassifier
4 from sklearn.linear_model import LogisticRegression
5
6 from sklearn.model_selection import train_test_split
7 import pickle
8 from sklearn.metrics import accuracy_score
9
10 df = pd.read_csv("diabetes.csv")
11 df = df[(df.BloodPressure != 0) & (df.BMI != 0) & (df.Glucose != 0)]
12
13 X = df[["Pregnancies", "Glucose", "BloodPressure", "SkinThickness", "Insulin", "BMI", "DiabetesPedigreeFunction", "Age"]]
14 y = df["Outcome"]
15
16 X_train, X_test, y_train, y_test = train_test_split(X, y, stratify=df.Outcome, random_state=0)
17
18 classifier = LogisticRegression(max_iter=1000)
19
20 classifier.fit(X_train, y_train)
21
22 logpre = classifier.predict(X_test)
23 print(accuracy_score(y_test, logpre))
24
25
26 pickle.dump(classifier, open("model.pkl", "wb"))
```

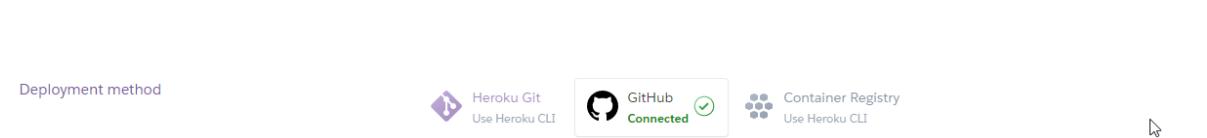
3. Create a requirements file that holds all the libraries that need to be installed:



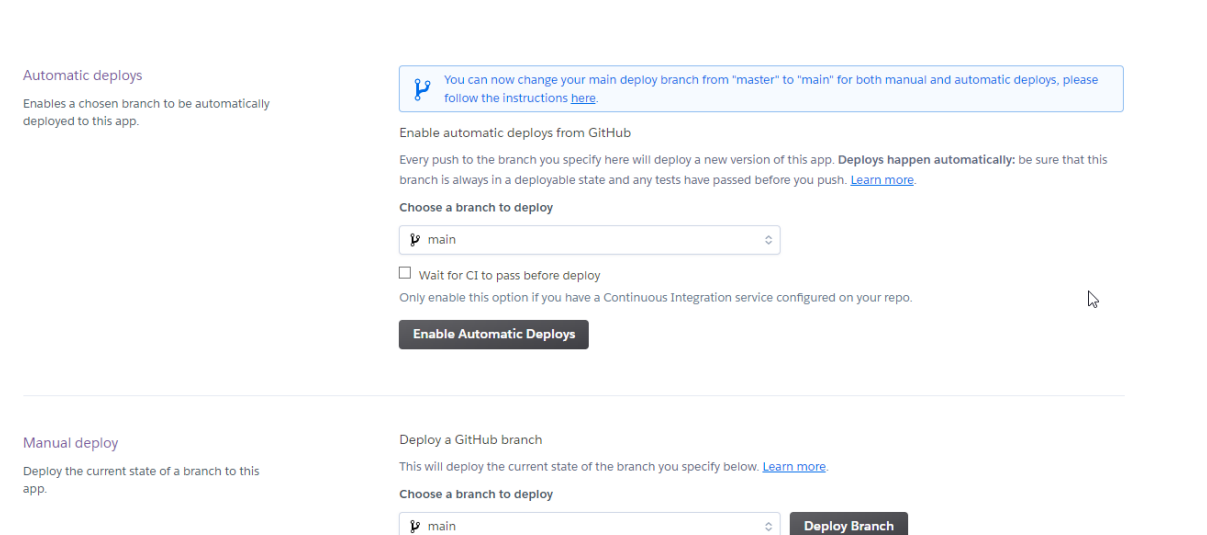
The screenshot shows a GitHub repository file named `requirements.txt` in the `HerokuApp` repository. The file contains 10 lines of Python dependencies. The interface includes a header with the repository name, a 'Go to file' button, and a 'History' link. Below the file name, it shows the latest commit and a contributor. The file content is displayed in a dark-themed editor with line numbers.

```
1 Flask==1.1.1
2 itsdangerous==1.1.0
3 MarkupSafe==1.1.1
4 Werkzeug==0.15.5
5 numpy>=1.9.2
6 scipy>=0.15.1
7 scikit-learn>=0.18
8 matplotlib>=1.4.3
9 pandas>=0.19
10 gunicorn>=20.0,<21.0
```

4. Connect Heroku to GitHub repo:



5. Deploy the branch manually:



The screenshot shows the 'Automatic deploys' section in the Heroku dashboard. It includes a notification box stating that the main deploy branch can now be changed from 'master' to 'main'. Below this, there is a section for 'Automatic deploys' with a description, a 'Choose a branch to deploy' dropdown menu set to 'main', a checkbox for 'Wait for CI to pass before deploy', and an 'Enable Automatic Deploys' button. Below this, there is a section for 'Manual deploy' with a description, a 'Choose a branch to deploy' dropdown menu set to 'main', and a 'Deploy Branch' button.

Automatic deploys
Enables a chosen branch to be automatically deployed to this app.

You can now change your main deploy branch from "master" to "main" for both manual and automatic deploys, please follow the instructions [here](#).

Enable automatic deploys from GitHub
Every push to the branch you specify here will deploy a new version of this app. **Deploys happen automatically**; be sure that this branch is always in a deployable state and any tests have passed before you push. [Learn more](#).

Choose a branch to deploy
main

☐ Wait for CI to pass before deploy
Only enable this option if you have a Continuous Integration service configured on your repo.

Enable Automatic Deploys

Manual deploy
Deploy the current state of a branch to this app.

Deploy a GitHub branch
This will deploy the current state of the branch you specify below. [Learn more](#).

Choose a branch to deploy
main

Deploy Branch

6.View app on link: <https://diabetes-apppredictor-api.herokuapp.com>

Diabetes Prediction

Diabetes is a group of diseases that results in too much sugar in the blood. It is long-lasting and affects the body's function by turning food into energy. The sooner someone can identify their risk of diabetes, the sooner they will be able to receive treatment.

Pregnancies	Glucose	Blood Pressure (Diastolic)	Skin Thickness	Blood Glucose	BMI	Diabetes Pedigree Function	Age
-------------	---------	----------------------------	----------------	---------------	-----	----------------------------	-----

You may have diabetes.

Predict