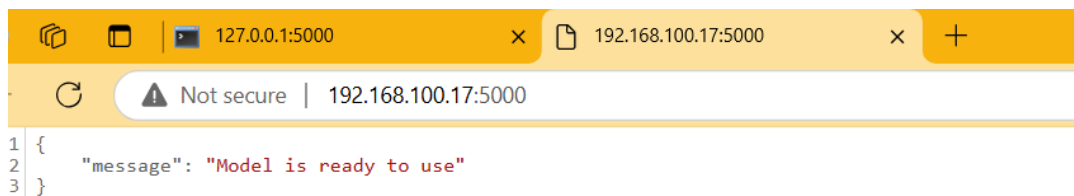Test deployment of our models.

Run application in terminal:

```
Terminal    Local  ×  +  ∨
(base) PS D:\OneDrive\App\Bank_Customer_Churn_Prediction\Customer_Churn_Prediction\deploy> python API.py
 * Serving Flask app 'API'
 * Debug mode: on
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
 * Running on all addresses (0.0.0.0)
 * Running on http://127.0.0.1:5000
 * Running on http://192.168.100.17:5000
Press CTRL+C to quit
 * Restarting with stat
 * Debugger is active!
 * Debugger PIN: 385-434-846
```
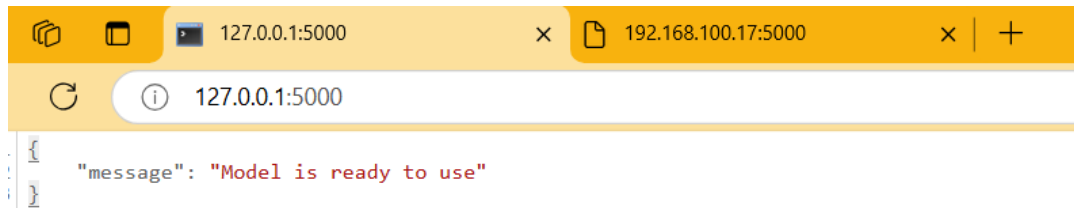
 Endpoints:

- GET /: Returns a message confirming that the model is ready to use.


```
1  {
2      "message": "Model is ready to use"
3  }
```

-
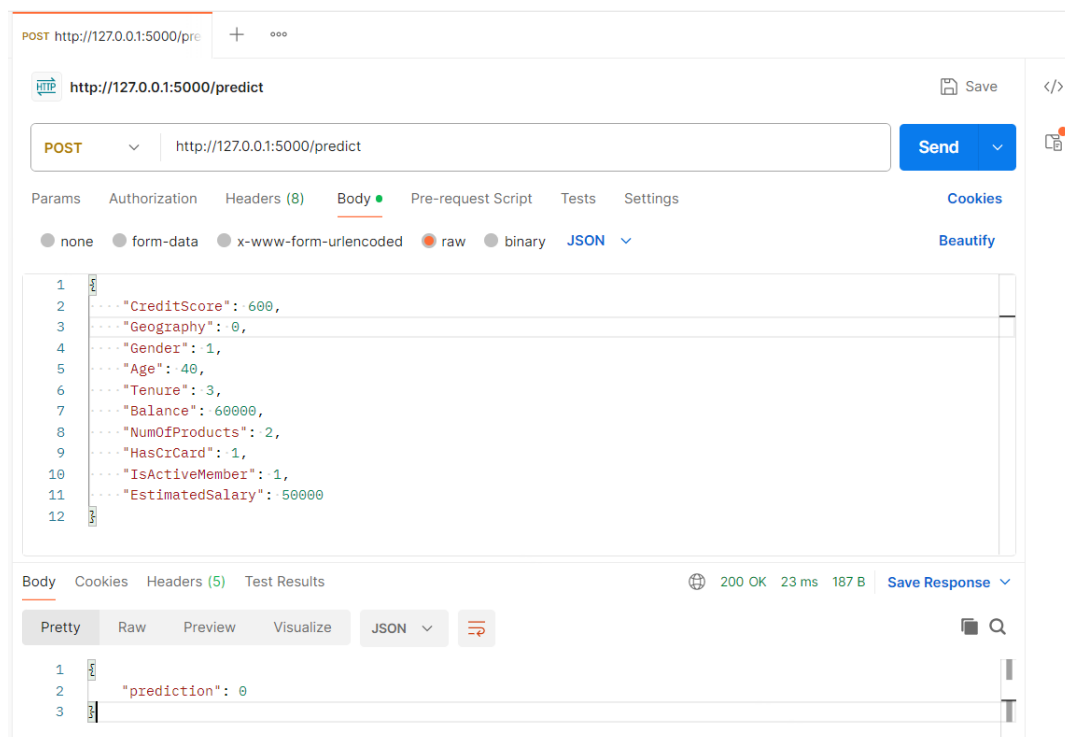

```
{
    "message": "Model is ready to use"
}
```

- POST /predict: Accepts JSON data for prediction and returns the model's prediction.


```
1   {
2       "CreditScore": 600,
3       "Geography": 0,
4       "Gender": 1,
5       "Age": 40,
6       "Tenure": 3,
7       "Balance": 60000,
8       "NumOfProducts": 2,
9       "HasCrCard": 1,
10      "IsActiveMember": 1,
11      "EstimatedSalary": 50000
12  }
```

```
1   {
2       "prediction": 0
3   }
```

Check real data from our initial dataset in API application

```
API.py        ModelingDataSet.csv  ×   {} data.json
1   CreditScore,Geography,Gender,Age,Tenure,Balance,NumOfProducts,HasCrCard,IsActiveMember,EstimatedSalary,Exited
2   619,0,0,42.0,2,0.0,1,1.0,1.0,101348.88,1
3   608,2,0,41.0,1,83807.86,1,0.0,1.0,112542.58,0
4   502,0,0,42.0,8,159660.8,3,1.0,0.0,113931.57,1
5   699,0,0,39.0,1,0.0,2,0.0,0.0,93826.63,0
6   645,2,1,44.0,8,113755.78,2,1.0,0.0,149756.71,1
7   822,0,1,50.0,7,0.0,2,1.0,1.0,10062.8,0
8   376,1,0,29.0,4,115046.74,4,1.0,0.0,119346.88,1
9   501,0,1,44.0,4,142051.07,2,0.0,1.0,74940.5,0
10  528,0,1,31.0,6,102016.72,2,0.0,0.0,80181.12,0
```

POST http://127.0.0.1:5000/pre   +   ∘∘∘

HTTP **http://127.0.0.1:5000/predict**   💾 Save   </>

| POST ∨ | http://127.0.0.1:5000/predict | **Send** ∨ |

Params   Authorization   Headers (8)   **Body ●**   Pre-request Script   Tests   Settings   **Cookies**

○ none   ○ form-data   ○ x-www-form-urlencoded   ● raw   ○ binary   **JSON** ∨   **Beautify**

```json
1   {
2     "CreditScore": 645,
3     "Geography": 2,
4     "Gender": 1,
5     "Age": 44,
6     "Tenure": 8,
7     "Balance": 113755.78,
8     "NumOfProducts": 2,
9     "HasCrCard": 1.0,
10    "IsActiveMember": 0.0,
11    "EstimatedSalary": 149756.71
12  }
```
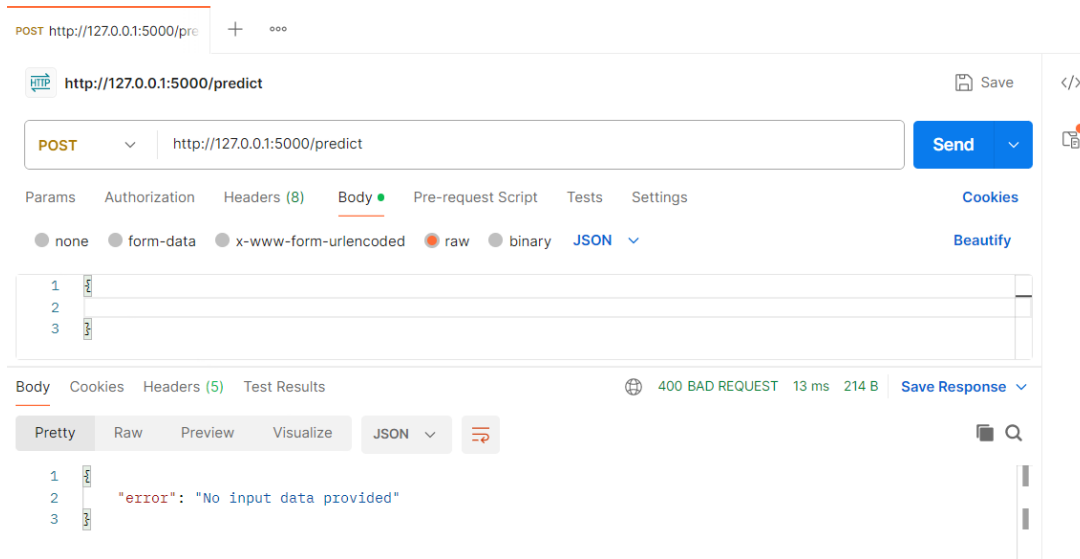
Body   Cookies   Headers (5)   Test Results   ⊕ 200 OK 102 ms 187 B   **Save Response** ∨

Pretty   Raw   Preview   Visualize   JSON ∨   ⇄

```json
1   {
2     "prediction": 1
3   }
```

⬜ Error Handling:

- Returns meaningful error messages if the input is missing or malformed.

After correction models name – work normal!