

## Batch Code:

### Model\_DP.py

```
# Importing the libraries
```

```
import numpy as np
```

```
import pandas as pd
```

```
import pickle
```

```
dataset = pd.read_csv('diabetes_prediction_dataset.csv')
```

```
del dataset["gender"]
```

```
del dataset["smoking_history"]
```

```
X = dataset.iloc[:, :6]
```

```
y = dataset.iloc[:, -1]
```

```
from sklearn.linear_model import LinearRegression
```

```
regressor = LinearRegression()
```

```
#Fitting model with trainig data
```

```
regressor.fit(X, y)
```

```
# Saving model to disk
```

```
pickle.dump(regressor, open('model_DP.pkl','wb'))
```

```
# Loading model to compare the results
```

```
model = pickle.load(open('model_DP.pkl','rb'))
```

```
print(model.predict([[20, 0, 1, 25, 5.5, 110]]))
```

## **app.py**

```
import numpy as np
from flask import Flask, request, render_template
import pickle
app = Flask(__name__)
model = pickle.load(open('model_DP.pkl', 'rb'))
@app.route('/')
def home():
    return render_template('index.html')
@app.route('/predict', methods=['POST'])
def predict():
    """
    For rendering results on HTML GUI
    """
    int_features = [int(x) for x in request.form.values()]
    final_features = [np.array(int_features)]
    prediction = model.predict(final_features)
    output = round(prediction[0], 2)
    return render_template('index.html', prediction_text='Probability of Diabetes should be: {}'.format(output))
if __name__ == "__main__":
    app.run(debug=True)
```

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