FLASK CODE

```python
import numpy as np

import pandas as pd

import pickle

import os

from flask import Flask, request, render_template

app=Flask(__name__,static_url_path='/Flask/static')

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

@app.route('/')

def home():

    return render_template('index.html')

@app.route('/predict',methods=["POST","GET"])

def predict():

    if request.method=="POST":

        Area=float(request.form["area"])

        Perimeter=float(request.form["perimeter"])

        Major_Axis_Length=float(request.form["major_axis_length"])

        Solidity=float(request.form["solidity"])

        Extent=float(request.form["extent"])

        Roundness=float(request.form["roundness"])

        Aspect_Ration=float(request.form["aspect"])

        Compactness=float(request.form["compactness"])

        Eccentricity =float(request.form["eccentricity"])

        Minor_Axis_Length=float(request.form["minor_axis_length"])


features_values=np.array([[Area,Perimeter,Major_Axis_Length,Minor_Axis_Length,Eccentricity,Solidity,Extent,Roundness,Aspect_Ration,Compactness]])
df=pd.DataFrame(features_values,columns=['Area','Perimeter','Major_Axis_Length','Minor_Axis_Length','Eccentricity','Solidity','Extent','Roundness','Aspect_Ration','Compactness'])
```

```python
        print(df)

        prediction=model.predict(df)

        print(prediction[0])

        result=prediction[0]

         if prediction[0]==0:

            result="Your seed lies in cercevelik class"

        elif prediction[0]==1:

            result="Your seed lies in Urgup Sivrisi class"

            text="Hence,based on calculation:"

            return render_template("predict.html",prediction_text=text+str(result))

    else:

            return render_template("predict.html")


if __name__=="__main__":

    app.run(debug=True,port=5000)
```

HTML CODE

INDEX.HTML

```html
<!DOCTYPE html>
<html lang="en">
<head>
   <meta charset="UTF-8">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>Seed</title>
   <style>
     body, html {
       height: 100%;
       margin: 0;
       font-family: Arial, Helvetica, sans-serif;
     }
     .bg {
```

```css
        background-image: url('../static/img/hero-bg.jpg'); /* Replace with your
image path */
        height: 100%;
        background-position: center;
        background-repeat: no-repeat;
        justify-content: center;
        background-size: cover;
        position: relative;
        color: white;
        text-align: center;
    }
    .nav {
        position: absolute;
        top: 0;
        width: 100%;
        padding: 20px;
        display: flex;
        justify-content: flex-end;
        background: rgba(0, 0, 0, 0.5); /* Optional for nav bar background */
    }
    .nav a {
        color: white;
        padding: 14px 20px;
        text-decoration: none;
        text-align: center;
    }
    .content {
        position: absolute;
        top: 50%;
        left: 50%;
        transform: translate(-50%, -50%);
    }
    .button {
        background-color: #4CAF50;
        border: none;
        color: white;
        padding: 15px 32px;
        text-align: center;
        text-decoration: none;
        display: inline-block;
```

```css
        font-size: 16px;
        margin: 4px 2px;
        cursor: pointer;
    }
    .about-bg {
        background-image: url('your-background-image.jpg'); /* Replace with
your image path */
        background-position: center;
        background-repeat: no-repeat;
        background-size: cover;
        padding: 60px 0;
    }
    .about-content {
        background: white;
        color: black;
        text-align: center;
        padding: 40px;
        max-width: 800px;
        margin: 0 auto;
        border-radius: 8px;
        box-shadow: 0 4px 8px rgba(0, 0, 0, 0.1);
    }
    .about-content h2 {
        color: #ff3366; /* Color for 'About Us' text */
    }
    .tag {
        display: inline-block;
        background-color: #ff3366; /* Background color for the 'ABOUT' tag */
        color: white;
        padding: 5px 10px;
        border-radius: 5px;
        margin-bottom: 20px;
        text-transform: uppercase;
    }
    </style>
</head>
<body background="https://encrypted-
tbn0.gstatic.com/images?q=tbn:ANd9GcQqLKKVcXcXqLsA98g1YItyoMTdFf
vtYQrV_Q&s">
    <div class="bg">
```

```html
<div class="nav">
    <a href="/">Home</a>
    <a href="#about">About</a>
    <a href="#about">Check</a>
    <a href="#about">Contact</a>
</div>
<div class="content">
    <h1>Welcome to Seed</h1>
    <h2>WE'RE CREATING HEALTHY SEEDS</h2>
    <p>Detecting the proper seed for the use!!</p>
    <a href="#about" class="button">Get Started</a>
</div>
</div>
<div id="about" class="about-bg">
    <div class="about-content">
        <div class="tag">About</div>
        <h2>Learn More <span style="color: #ff3366;">Check about your
pumpkin seed</span></h2>
        <a href="/predict" class="button">predict</a>
        <p>
            "Çerçevelik" and "Ürgüp Sivrisi" are specific types of pumpkin seeds
known for their unique characteristics and flavors.
        </p>
        <p>
            "Çerçevelik" pumpkin seeds are popular for their larger size and
robust flavor profile. They are often roasted and consumed as a snack, offering a
crunchy texture and nutty taste. These seeds are also rich in essential nutrients
like protein, fiber, and healthy fats, making them a nutritious addition to various
dishes or enjoyed on their own.
        </p>
        <p>
            On the other hand, "Ürgüp Sivrisi" pumpkin seeds are renowned for
their smaller size and intense flavor. These seeds are commonly used in
traditional Turkish cuisine, adding depth and richness to dishes like soups,
salads, and desserts. They are prized for their distinct taste and are often toasted
to enhance their flavor before being incorporated into recipes.
        </p>
        <p>
```

Both "Çerçevelik" and "Ürgüp Sivrisi" pumpkin seeds showcase the diversity and versatility of this humble ingredient, offering culinary enthusiasts a wide range of options for exploration and experimentation in the kitchen.
        </p>
      </div>
    </div>
</body>
</html><!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Seed</title>
    <style>
        body, html {
            height: 100%;
            margin: 0;
            font-family: Arial, Helvetica, sans-serif;
        }
        .bg {
            background-image: url('../static/img/hero-bg.jpg'); /* Replace with your image path */
            height: 100%;
            background-position: center;
            background-repeat: no-repeat;
            justify-content: center;
            background-size: cover;
            position: relative;
            color: white;
            text-align: center;
        }
        .nav {
            position: absolute;
            top: 0;
            width: 100%;
            padding: 20px;
            display: flex;
            justify-content: flex-end;
            background: rgba(0, 0, 0, 0.5); /* Optional for nav bar background */
        }

```css
.nav a {
    color: white;
    padding: 14px 20px;
    text-decoration: none;
    text-align: center;
}
.content {
    position: absolute;
    top: 50%;
    left: 50%;
    transform: translate(-50%, -50%);
}
.button {
    background-color: #4CAF50;
    border: none;
    color: white;
    padding: 15px 32px;
    text-align: center;
    text-decoration: none;
    display: inline-block;
    font-size: 16px;
    margin: 4px 2px;
    cursor: pointer;
}
.about-bg {
    background-image: url('your-background-image.jpg'); /* Replace with your image path */
    background-position: center;
    background-repeat: no-repeat;
    background-size: cover;
    padding: 60px 0;
}
.about-content {
    background: white;
    color: black;
    text-align: center;
    padding: 40px;
    max-width: 800px;
    margin: 0 auto;
    border-radius: 8px;
```

```
      box-shadow: 0 4px 8px rgba(0, 0, 0, 0.1);
    }
    .about-content h2 {
      color: #ff3366; /* Color for 'About Us' text */
    }
    .tag {
      display: inline-block;
      background-color: #ff3366; /* Background color for the 'ABOUT' tag */
      color: white;
      padding: 5px 10px;
      border-radius: 5px;
      margin-bottom: 20px;
      text-transform: uppercase;
    }
  </style>
</head>
<body background="https://encrypted-
tbn0.gstatic.com/images?q=tbn:ANd9GcQqLKKVcXcXqLsA98g1YItyoMTdFf
vtYQrV_Q&s">
  <div class="bg">
    <div class="nav">
      <a href="/">Home</a>
      <a href="#about">About</a>
      <a href="#about">Check</a>
      <a href="#about">Contact</a>
    </div>
    <div class="content">
      <h1>Welcome to Seed</h1>
      <h2>WE'RE CREATING HEALTHY SEEDS</h2>
      <p>Detecting the proper seed for the use!!</p>
      <a href="#about" class="button">Get Started</a>
    </div>
  </div>
  <div id="about" class="about-bg">
    <div class="about-content">
      <div class="tag">About</div>
      <h2>Learn More <span style="color: #ff3366;">Check about your
pumpkin seed</span></h2>
      <a href="/predict" class="button">predict</a>
      <p>
```

"Çerçevelik" and "Ürgüp Sivrisi" are specific types of pumpkin seeds known for their unique characteristics and flavors.
        </p>
        <p>

"Çerçevelik" pumpkin seeds are popular for their larger size and robust flavor profile. They are often roasted and consumed as a snack, offering a crunchy texture and nutty taste. These seeds are also rich in essential nutrients like protein, fiber, and healthy fats, making them a nutritious addition to various dishes or enjoyed on their own.
        </p>
        <p>

On the other hand, "Ürgüp Sivrisi" pumpkin seeds are renowned for their smaller size and intense flavor. These seeds are commonly used in traditional Turkish cuisine, adding depth and richness to dishes like soups, salads, and desserts. They are prized for their distinct taste and are often toasted to enhance their flavor before being incorporated into recipes.
        </p>
        <p>

Both "Çerçevelik" and "Ürgüp Sivrisi" pumpkin seeds showcase the diversity and versatility of this humble ingredient, offering culinary enthusiasts a wide range of options for exploration and experimentation in the kitchen.
        </p>
      </div>
    </div>
</body>
</html>

PREDICT.HTML

```
<!DOCTYPE html>
<html lang="en">
<head>
   <meta charset="UTF-8">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>Predict - Seed</title>
   <link rel="stylesheet" href="{{ url_for('static', filename='styles.css') }}">
<style>
 body
 {
```

```css
        font-family: Arial, Helvetica, sans-serif;
        margin: 0;
        padding: 0;
        background-color: #f8f9fa;
    }
    .nav {
        width: 100%;
        padding: 20px;
        display: flex;
        justify-content: flex-end;
        background: #000;
        color: white;
    }
    .nav a {
        color: white;
        padding: 14px 20px;
        text-decoration: none;
        text-align: center;
    }
    .nav a:hover {
        background-color: #ddd;
        color: black;
    }
    .nav a.active {
        border-bottom: 2px solid #ff3366;
    }
    .container {
        max-width: 600px;
        margin: 50px auto;
        padding: 20px;
        background: white;
        box-shadow: 0 4px 8px rgba(0, 0, 0, 0.1);
        border-radius: 8px;
    }
    .breadcrumb {
            margin: 10px 0;
```

```css
            }
            .breadcrumb a {
                text-decoration: none;
                color: #007bff;
            }
            .breadcrumb a:hover {
                text-decoration: underline;
            }
    h2 {
        text-align: center;
        color: #333;
    }
    label {
        display: block;
        margin: 15px 0 5px;
    }
    input[type="text"], input[type="number"] {
        width: 100%;
        padding: 10px;
        margin: 5px 0;
        border: 1px solid #ccc;
        border-radius: 4px;
        box-sizing: border-box;
        background-color: #f4f4f4;
    }
    .submit-btn {
        display: block;
        width: 100%;
        padding: 10px;
        background-color: #4CAF50;
        color: white;
        border: none;
        border-radius: 4px;
        cursor: pointer;
        margin-top: 20px;
    }
```

```css
.submit-btn:hover {
    background-color: #45a049;
}
.result {
        background-color: white;
        padding: 20px;
        margin: 10px 0;
        border-radius: 5px;
        box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);
    }
    .result h2 {
        margin-top: 0;
    }
    .image-container {
        text-align: center;
    }
    .image-container img {
        max-width: 100%;
        height: auto;
        border-radius: 5px;
    }
</style>
</head>
<body>
 <div class="nav">
   <a href="/">Home</a>
   <a href="#about">About</a>
   <a href="#about" class="active">Check</a>
   <a href="#about">Contact</a>
</div>
<div class="container">
  <div class="breadcrumb">
   <a href="index.html">Home</a> / Predict
</div>
  <header>
      <h1>Enter the Details</h1>
```

```html
      </header>
      <main>
        <form action="/predict" method="post">
         <div>
          <label for="area">Area:</label>
          <input type="text" id="area" name="area" required>
         </div>
         <br>
         <div>
          <label for="perimeter">Perimeter:</label>
          <input type="text" id="perimeter" name="perimeter" required>
         </div>
         <br>
         <div>
          <label for="major_axix_length">Major_Axis_Length:</label>
          <input type="text" id="major_axis_length" name="major_axis_length"
required>
         </div>
         <br>
         <div>
          <label for="solidity">Solidity(range:0-1):</label>
          <input type="text" id="solidity" name="solidity" required>
         </div>
         <br>
         <div>
           <label for="extent">Extent(range: 0-1):</label>
          <input type="text" id="extent" name="extent" required>
         </div>
         <br>
         <div>
          <label for="roundness">Roundness(range:0-1):</label>
          <input type="text" id="roundness" name="roundness" required>
         </div>
         <br>
         <div>
           <label for="aspect">Aspect Ratio(range:0-3):</label>
```

```html
      <input type="text" id="aspect" name="aspect" required>
    </div>
    <br>
    <div>
      <label for="eccentricity">Eccentricity:</label>
      <input type="text" id="eccentricity" name="eccentricity" required>
    </div>
    <br>
    <div>
      <label for="minor_axis_length">Minor_Axis_Length:</label>
      <input type="text" id="minor_axis_length" name="minor_axis_length"
required>
    </div>
    <br>
    <div>
      <label for="compactness">Compactness(range:0-1):</label>
      <input type="text" id="compactness" name="compactness" required>
    </div>
    <br>
      <button type="submit">Submit</button>
    </form>
    <div class="result">
      <h2>Result</h2>
      <p> {{prediction_text}}</p>
    </div>
    <div class="image-container">
      <!--img src="../static/img/hero-bg.jpg" alt="Seeds"-->
    </div>
  </main>
  </div>
  </body>
</html>
```