```
<html>
  <head>
    <meta charset="utf-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1">

    <link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.5/css/bootstrap.min.css"
integrity="sha512-
dTfge/zgoMYpP7QbHy4gWMEGsbsdZeCXz7irItjcC3sPUFtf0kuFbDz/ixG7ArTxmDjLXDmezHubeNi
kyKGVyQ==" crossorigin="anonymous">
    <title>Charleston Housing Analysis and Predictions</title>
  </head>
  <body>
    <nav class="navbar navbar-inverse">
      <div class="container">
        <div class="navbar-header">
          <button type="button" class="navbar-toggle collapsed" data-toggle="collapse" data-
target="#navbar" aria-expanded="false" aria-controls="navbar">
            <span class="sr-only">Toggle navigation</span>
            <span class="icon-bar"></span>
            <span class="icon-bar"></span>
            <span class="icon-bar"></span>
          </button>
          <a class="navbar-brand"
href="http://mailman82.pythonanywhere.com/">Charleston Housing Analysis and
Predictions</a>
        </div>
      </div>
    </nav>
  </body>
  <body>
    <h2>The Regression Analysis</h2>
    <h3> Start with base Linear Regression of the data split into training and testing sets:</h3>
    <img src=" {{ plot_url2 }}" style="width:20%"><img
src=" {{ plot_url3 }}" style="width:20%">
    <p> The results of this regression are: </p>
    <p>R^2 Value: {{ linreg_r2 }}</p>
    <p>Coefficient: </p>
    <p>
      {{ linreg_co | safe }}
    </p>
    <h4> {{ linstate }} </h4>
    <br>
```

```
    <br>
    <p>R^2 Value: {{ regul_r2 }}</p>
    <br>
    <p> {{ regstate }}</p>
    <p> Below is the performance of the 5 folds: </p>
    <img src=" {{ plot_url1 }}"style="width:40%">
    <br>
    <p> Here is the results of the coefficients from the cross-validation of the dataset using the alpha value ({{alpha}}) found through optimizing the regularization:</p>
    <p>
      {{ regcoe | safe }}
    </p>
    <h3>Finally, the grid search cross-validation is performed for the dataset as another validation:</h3>
    <p> The Grid Score is: {{gridsc}} </p>
    <p> The Grid Estimator is: {{gridest}} </p>
    <h4> {{result}} </h4>
  </body>
</html>
```