WT

Q1)

HTML File-

```
<!DOCTYPE html>
<html>
<head>
<title>String Separator Form</title>
</head>
<body>
<h1>String Separator Form</h1>
<form action="Demo.php" method="post">
<label for="inputString">Enter a String:</label><br>
<input type="text" id="inputString" name="inputString" required><br><br>
<label for="separator">Select a Separator:</label><br>
<select id="separator" name="separator">
<option value="#">#</option>
<option value="|">|</option>
<option value="%">%</option>
</select><br><br>
<label for="newSeparator">Replace with Separator:</label><br>
<input type="text" id="newSeparator" name="newSeparator" required><br><br>
<input type="submit" value="Submit">
</form>
</body>
</html>
```

PHP File

```
<?php
if ($_SERVER["REQUEST_METHOD"] == "POST") {
$inputString = $_POST['inputString'];
$separator = $_POST['separator'];
$newSeparator = $_POST['newSeparator'];
$words = explode($separator, $inputString);
$replacedString = str_replace($separator, $newSeparator, $inputString);
$lastWord = end($words);
echo "<h1>Results</h1>";
echo "<p>Original String: <strong>$inputString</strong></p>";
echo "<p>Words: <strong>" . implode(', ', $words) . "</strong></p>";
echo "<p>String with Replaced Separator: <strong>$replacedString</strong></p>";
echo "<p>Last Word: <strong>$lastWord</strong></p>";
} else {
echo "<p>No data received.</p>";
}
?>
```

Q2) a)

```
import numpy as np
import matplotlib.pyplot as plt
random_data = np.random.randint(1, 101, size=50)
```

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```
plt.figure(figsize=(12, 6))
 plt.subplot(1, 2, 1)
 plt.plot(random_data, color='blue', marker='o', linestyle='-', markersize=5)
plt.title('Line Chart', fontsize=14)
plt.xlabel('Index', fontsize=12)
plt.ylabel('Value', fontsize=12)
plt.grid(True)
plt.subplot(1, 2, 2)
plt.scatter(range(len(random_data)), random_data, color='green', alpha=0.7)
plt.title('Scatter Plot', fontsize=14)
 plt.xlabel('Index', fontsize=12)
 plt.ylabel('Value', fontsize=12)
 plt.tight_layout()
 plt.show()
```

b)

```
import matplotlib.pyplot as plt
subjects = ['Math', 'Science', 'English', 'History', 'Art']
marks = [85, 90, 78, 88, 92]
plt.figure(figsize=(8, 8))
plt.pie(marks, labels=subjects, autopct='%1.1f%%', startangle=140, colors=['gold', 'lightcoral',
'lightskyblue', 'lightgreen', 'lightpink'])
plt.title('Marks Distribution by Subject', fontsize=16)
plt.axis('equal')
plt.show()
```

c)

```
f = pd.read_csv('winequality-red.csv')
print("Describing the Dataset:")
print(df.describe())
print("\nShape of the Dataset:")
print(df.shape)
print("\nFirst 3 Rows of the Dataset:")
print(df.head(3))
```