

## Slip 18: HTML Program - PHP Menu-driven Array Operations

```
<html>
<body>
  <form action="slip18.php" method="POST">
    <input type="submit" value="Perform Operations">
  </form>
</body>
</html>
```

### PHP File (slip18.php)

```
<?php
$arr = ["Sagar" => "31", "Vicky" => "41", "Leena" => "39", "Ramesh" => "40"];

echo "<h4>Original Array:</h4>";
print_r($arr);

$reversed = array_reverse($arr);
echo "<h4>Reversed Array:</h4>";
print_r($reversed);

shuffle($arr);
echo "<h4>Shuffled Array:</h4>";
print_r($arr);

extract($arr);
echo "<h4>Array as Variables:</h4>";
echo "Sagar: $Sagar, Vicky: $Vicky, Leena: $Leena, Ramesh: $Ramesh";
?>
```

## Slip 18: Python Program - Box Plot of Iris Dataset Features

```
import pandas as pd
import seaborn as sns
import matplotlib.pyplot as plt

df = pd.read_csv('iris.csv')
sns.boxplot(x='species', y='sepal_length', data=df)
plt.title('Sepal Length Distribution Across Species')
plt.show()

sns.boxplot(x='species', y='sepal_width', data=df)
plt.title('Sepal Width Distribution Across Species')
plt.show()
```

## Slip 18: Python Program - Heights and Weights Data

```
import pandas as pd

df = pd.read_csv('Heights_and_Weights.csv')
print('First 5 rows:')
print(df.head())
print('Last 5 rows:')
```

```
print(df.tail())  
print('Random 10 rows:')  
print(df.sample(10))
```