

Program 16

Develop a user-friendly electricity bill calculator using HTML and PHP. Collect the consumer data, and the units used, through an input form. Based on the given tariff, calculate the consumer bill amount.

Tariff:

Rate of electricity for 1-100 units: Rs.5/unit

Rate of electricity from 101 units to 200 units: Rs. 7.5/unit

Rate of electricity from 201 units: Rs.10/unit

electricity.php:

```
<!DOCTYPE html>
<html>
<head>
<title>Electricity Bill Calculator</title>

<style>
body{
    margin: 0;
    padding: 40px 0;
    display: flex;
    justify-content: center;
}
.container{
    width: 450px;
    padding: 30px;
    border-radius: 12px;
    box-shadow: 0 4px 20px rgba(0,0,0,0.1);
}
h2{
    text-align: center;
    color:#222;
}
label{
    font-weight: bold;
```

```
margin-top: 15px;  
display: block;  
}  
  
input[type="text"]{  
width: 100%;  
padding: 10px;  
border: 1px solid #ccc;  
border-radius: 5px;  
margin-top: 5px;  
font-size: 15px;  
}  
  
.error{  
color: red;  
font-size: 14px;  
}  
  
input[type="submit"]{  
width: 100%;  
padding: 12px;  
background:#007bff;  
border:none;  
color:white;  
font-size: 17px;  
border-radius: 5px;  
cursor:pointer;  
margin-top: 20px;  
}  
  
input[type="submit"]:hover{  
background:#0056b3;  
}
```

```
.output-box{  
    margin-top: 25px;  
    background:#fafafa;  
    border:1px solid #ddd;  
    padding: 15px;  
    border-radius: 8px;  
    font-size: 16px;  
}  
</style>  
  
</head>  
  
<body>  
  
<div class="container">  
  
<h2>Electricity Bill Calculator</h2>  
  
<?php  
$name = $number = $units = "";  
$bill = 0;  
$errors = [];  
  
if($_SERVER["REQUEST_METHOD"] == "POST") {  
  
    if(empty($_POST["name"])) {  
        $errors["name"] = "Enter consumer name";  
    } else { $name = $_POST["name"]; }  
  
    if(empty($_POST["number"])) {  
        $errors["number"] = "Enter consumer number";  
    } else {  
        $number = $_POST["number"];  
        $units = $_POST["units"];  
        $rate = $_POST["rate"];  
        $bill = calculateBill($number, $units, $rate);  
    }  
}  
if(count($errors) > 0) {  
    $output = "

There were errors in your form:



- ";  
    foreach($errors as $error) {  
        $output .= "- $error
";  
    }  
    $output .= "

";  
} else {  
    $output = "

Your bill is: " . $bill . "

";  
}  
echo $output;  
</div>
```

```

} else { $number = $_POST["number"]; }

if(empty($_POST["units"])) {
    $errors["units"] = "Enter units used";
} else { $units = $_POST["units"]; }

if(empty($errors)) {
    if ($units <= 100) {
        $bill = $units * 5;
    } elseif ($units <= 200) {
        $bill = (100 * 5) + (($units - 100) * 7.5);
    } else {
        $bill = (100 * 5) + (100 * 7.5) + (($units - 200) * 10);
    }
}

?>

<form method="post">

<label>Consumer Name:</label>
<input type="text" name="name" value=<?php echo $name; ?>>
<span class="error"><?php echo $errors["name"] ?? ""; ?></span>

<label>Consumer Number:</label>
<input type="text" name="number" value=<?php echo $number; ?>>
<span class="error"><?php echo $errors["number"] ?? ""; ?></span>

<label>Units Used:</label>
<input type="text" name="units" value=<?php echo $units; ?>>
<span class="error"><?php echo $errors["units"] ?? ""; ?></span>

```

```

<input type="submit" value="Calculate Bill">

</form>

<?php

if($_SERVER["REQUEST_METHOD"] == "POST" && empty($errors)) {

    echo "<div class='output-box'>";
    echo "<h3>Bill Details</h3>";
    echo "Consumer Name: $name <br>";
    echo "Consumer Number: $number <br>";
    echo "Units Used: $units <br>";
    echo "<strong>Total Bill Amount: Rs. $bill</strong>";
    echo "</div>";
}

?>

</div>

</body>
</html>

```

OUTPUT:

Electricity Bill Calculator

Consumer Name:
Mohammed Fahis

Consumer Number:
12365985

Units Used:
258

Calculate Bill

Bill Details

Consumer Name: Mohammed Fahis
 Consumer Number: 12365985
 Units Used: 258
Total Bill Amount: Rs. 1830

