EXPERIMENT NO 5

Working on PHP Basic Controls

AIM: To create simple PHP applications using the various Control Structures like sequence, decision, loop and switch cases.

Question (1). Make an Electricity Bill Calculator in PHP using the conditional statements with the following conditions specified below.

- **For the first 50 units – Rs. 3.50/unit**
- **For next 100 units – Rs. 4.00/unit**
- **For next 100 units – Rs. 5.20/unit**

For units above 50 – Rs. 6.50/unit

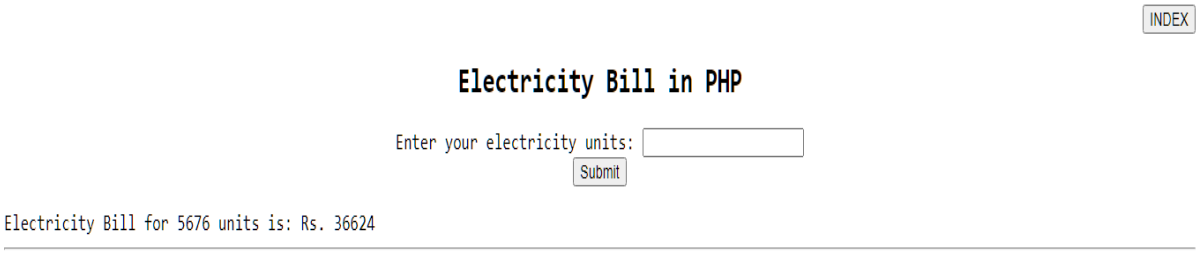
SOURCE CODE:

PHP

```
<html>
    <head>
        <title>Electricity Bill in PHP</title>
    </head>
    <body>
    <p align="right">
        <a href="http://localhost/phpScripts/"><button
onmouseover="this.style.color='red'">INDEX</button></a>
    </p>
        <center>
        <h2>Electricity Bill in PHP</h2>
        <form method="post">
        <div>
            <label for="funits">Enter your electricity units: </label>
            <input type="number" name="units">
        </div>
        <div>
            <input type="submit" value="Submit">
        </div>
        </form>
        </center>
        <?php
        $U=$_POST["units"];
        $RES;
        if (0<$U && $U<=50){
            $RES=$U*3.50;
```

```
            echo "Electricity Bill for ".$U." units is: Rs. ".$RES;
        }
        else if (50<$U && $U<=150){
            $first50=50*3.50;
            $next100=($U-50)*4;
            $RES=$first50+$next100;
            echo "Electricity Bill for ".$U." units is: Rs. ".$RES;
        }
        else if (150<$U && $U<=250){
            $first50=50*3.50;
            $next100=100*4;
            $nextnext100=($U-150)*5.20;
            $RES=$first50+$next100+$nextnext100;
            echo "Electricity Bill for ".$U." units is: Rs. ".$RES;
        }
        else if ($U>250){
            $first50=50*3.50;
            $next100=100*4;
            $nextnext100=150*5.20;
            $Unit200=($U-250)*6.50;
            $RES=$first50+$next100+$nextnext100+$Unit200;
            echo "Electricity Bill for ".$U." units is: Rs. ".$RES;
        }
        echo "<br><hr>";
    ?>
    </body>
</html>
```

OUTPUT SCREENSHOT:



Question (2). Implement the below-given software design using PHP. This algorithm finds all 3-digit Armstrong numbers.

- **Step 1. [INITIALIZE N WITH THE FIRST 3-DIGIT NUMBER] N ← 100**
- **Step 2. REPEAT STEPS 3 THROUGH 10 UNTIL N > 999**
- **Step 3. [INITIALIZE S, WHICH HOLDS THE SUM OR THE CUBES] S ← 0**
- **Step 4. M ← N [THIS IS TO MAKE A COPY OR N]**
- **Step 5. REPEAT STEP 6 THROUGH STEP 8 WHILE M > 0**
- **Step 6. COMPUTE REM ← REMAINDER OF (M/10)**
- **Step 7. COMPUTE S ← S + REM*REM*REM**

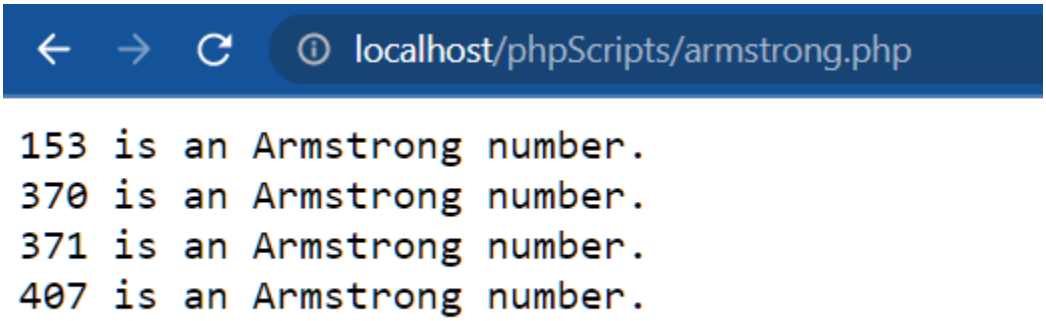
- **Step 8. COMPUTE M ← INTEGER PART OF (M/10)**
- **Step 9. IF S = N THEN PRINT N END-IF**
- **Step 10. [INCREMENT N TO TAKE THE NEXT NUMBER] COMPUTE N ← N + 1 END-REPEAT**
- **Step 11. END**

SOURCE CODE:

PHP

```
<?php
$N = 100;
while ($N <= 999) {
    $S = 0;
    $M = $N;
    while ($M > 0) {
        $REM = $M % 10;
        $S += $REM * $REM * $REM;
        $M = (int)($M / 10);
    }
    if ($S == $N) {
        echo $N . " is an Armstrong number.<br>";
    }
    $N++;
}
```

OUTPUT SCREENSHOT:



Question (3). Determine the difference between the two given dates. Construct a flowchart to show how to do it.

SOURCE CODE:

PHP

```
<?php
$sd = date_create(date('Y-m-d'));
$ed = date_create('2025-04-08');
$time = date_diff($sd, $ed);
echo "No. of days left till April 8, 2025 is: " . $time->format("%y years %m months
%d days") . "<br><hr>";
?>
```

OUTPUT SCREENSHOT: