

PHP ASSIGNMENT

1. <?php

```
echo "Enter the first number: ";
```

```
$num1 = readline();
```

```
echo "Enter the second number: ";
```

```
$num2 = readline();
```

```
echo "Enter the third number: ";
```

```
$num3 = readline();
```

```
// Arrange the numbers in ascending order
```

```
if ($num1 > $num2) {
```

```
    $temp = $num1;
```

```
    $num1 = $num2;
```

```
    $num2 = $temp;
```

```
}
```

```
if ($num2 > $num3) {
```

```
    $temp = $num2;
```

```
    $num2 = $num3;
```

```
    $num3 = $temp;
```

```
}
```

```
if ($num1 > $num2) {
```

```
    $temp = $num1;
```

```
    $num1 = $num2;
```

```
    $num2 = $temp;
```

```
}
```

```
echo "Numbers in ascending order: $num1, $num2, $num3\n";
```

```
?>
```

2. <?php

```
// Function to find the index of the smallest element in an array
```

```
function smallestIndex($array, $size) {
```

```
    if ($size <= 0) {
```

```
        return -1; // Invalid size
```

```
    }
```

```

$minIndex = 0; // Assume the first element is the smallest
for ($i = 1; $i < $size; $i++) {
    if ($array[$i] < $array[$minIndex]) {
        $minIndex = $i; // Update the index of the smallest element
    }
}
return $minIndex;
}

// Test the smallestIndex function
$numbers = array(5, 2, 8, 1, 7);
$size = count($numbers);
$index = smallestIndex($numbers, $size);

// Output the result
if ($index != -1) {
    echo "The smallest element is at index $index.\n";
    echo "The smallest element is: " . $numbers[$index] . "\n";
} else {
    echo "Invalid array size.\n";
}

?>

```

3. <?php

```

// Prompt user for input
echo "Enter a string: ";
$inputString = readline();

$upperString = "";
for ($i = 0; $i < strlen($inputString); $i++) {

```

```

$char = $inputString[$i];

// Check if the character is a lowercase letter
if ($char >= 'a' && $char <= 'z') {

    $char = chr(ord($char) - ord('a') + ord('A'));

}

// Append the character to the uppercase string
$upperString .= $char;

}

echo "Uppercase string: $upperString\n";

?>

```

4. <?php

```

// Function to add two matrices

function addMatrices($matrix1, $matrix2, $rows, $columns) {

    $resultMatrix = array();

    for ($i = 0; $i < $rows; $i++) {

        for ($j = 0; $j < $columns; $j++) {

            $resultMatrix[$i][$j] = $matrix1[$i][$j] + $matrix2[$i][$j];

        }

    }

    return $resultMatrix;

}

// Function to display a matrix

function displayMatrix($matrix, $rows, $columns) {

```

```

for ($i = 0; $i < $rows; $i++) {
    for ($j = 0; $j < $columns; $j++) {
        echo $matrix[$i][$j] . "\t";
    }
    echo "\n";
}

}

// Prompt user for matrix size
echo "Enter the number of rows (N): ";
$rows = readline();

echo "Enter the number of columns (M): ";
$columns = readline();

// Initialize matrices
$matrix1 = array();
$matrix2 = array();

// Prompt user for matrix elements
echo "Enter elements for Matrix 1:\n";
for ($i = 0; $i < $rows; $i++) {
    for ($j = 0; $j < $columns; $j++) {
        echo "Matrix 1 [$i][$j]: ";
        $matrix1[$i][$j] = readline();
    }
}

echo "Enter elements for Matrix 2:\n";

```

```

for ($i = 0; $i < $rows; $i++) {
    for ($j = 0; $j < $columns; $j++) {
        echo "Matrix 2 [$i][$j]: ";
        $matrix2[$i][$j] = readline();
    }
}

// Add matrices
$resultMatrix = addMatrices($matrix1, $matrix2, $rows, $columns);

// Display matrices and result
echo "\nMatrix 1:\n";
displayMatrix($matrix1, $rows, $columns);

echo "\nMatrix 2:\n";
displayMatrix($matrix2, $rows, $columns);

echo "\nSum of Matrices:\n";
displayMatrix($resultMatrix, $rows, $columns);

?>

```

5. <?php

```

// Declare an array alpha of 50 components of type float
$alpha = array();

// Initialize the array
for ($i = 0; $i < 50; $i++) {
    if ($i < 25) {

```

```

        // The first 25 components are equal to the square of the index variable
        $alpha[$i] = $i * $i;

    } else {

        // The last 25 components are equal to three times the index variable
        $alpha[$i] = 3 * $i;

    }

}

// Output the array with 10 elements per line
echo "Array alpha:\n";

for ($i = 0; $i < 50; $i++) {

    echo $alpha[$i] . "\t";

    // Print a new line after every 10 elements
    if (($i + 1) % 10 == 0) {

        echo "\n";

    }

}

?>

```