## Practical Assignment – 2

- 1. Create a PHP script to print "Hello World" using a variable. Utilize both print and echo statements to display the output.
- 2. Create a PHP script to perform arithmetic operations on two numbers. Implement addition, subtraction, multiplication, and division.
- 3. Create a PHP script to calculate the square and cube of a given number. Display the results accordingly.
- 4. Write a PHP script to convert between US dollars and Indian rupees. Implement the conversion in both directions.
- 5. Write a PHP script to calculate the area of a circle and a triangle.
- 6. Write a PHP script to calculate simple interest. Input the principal, rate, and time, and display the calculated interest.
- 7. Write a PHP script to manage marks for five subjects. Calculate the total, percentage, and determine the class based on the percentage.
- 8. Write a PHP script to display odd and even numbers from 1 to 100. Separate and list them accordingly.
- 9. Write a PHP script to display a series of even numbers (2, 4, 6, 8, 10, ...) up to a specified limit
- 10. Write a PHP script to calculate the sum of a series within a given range.
- 11. Write a PHP script to calculate the factorial of a given number. Implement a loop or recursion to determine the factorial.
- 12. Create a PHP script to generate Fibonacci series up to a given number.
- 13. Create a PHP script to generate a multiplication table for a given number. Display the table up to 10 multiples.
- 14. Write a PHP script to check if a given year is a leap year.
- 15. Write a PHP script that accepts a starting number, an ending number, and a direction as inputs to display a sequential series. The direction can be either 'F' for forward or 'R' for reverse. If the starting number is greater than the ending number, the script should output a message saying "First number must be smaller than the second number." Additionally, if the direction provided is not 'F' or 'R' (in either lowercase or uppercase), the script should display "Direction must be F or R.".
  - a. INPUT: 1 10 F then OUTPUT: 1 2 3 4 5 6 7 8 9 10
  - b. INPUT: 1 10 R then OUTPUT: 10 9 8 7 6 5 4 3 2 1
  - c. INPUT: 10 1 F then OUTPUT: First no must be smaller than second no
  - d. INPUT: 1 10 A then OUTPUT: Direction must be F or R
- 16. Write a PHP script to calculate the total electricity bill based on unit consumption with the following rates:
  - a. For the first 50 units: Rs. 1.50 per unit
  - b. For the next 100 units: Rs. 2.25 per unit
  - c. For the subsequent 100 units: Rs. 2.80 per unit

- d. For units exceeding 250: Rs. 3.50 per unit
- e. Add an additional surcharge of 20% to the total bill.
- 17. Write a PHP code to perform all possible type casting and conversion operations. Design output in following format.

ariable Name Variable Type	Variable Value	Converted Type	Converted Value
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18. Write a PHP script to perform all possible string operations on given inputted string values. Design output page in following format.

String 1 String 2 Operations Result
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- 19. Develop a PHP webpage titled "Course Details". Use an array to store course names and display each course with a unique color.
- 20. Create a PHP script that initializes a numeric array with 10 values. Iterate through the array and print only the odd numbers.
- 21. Write a PHP script to create two numeric arrays and merge them into a third array. Use a foreach loop to display the combined array elements.
- 22. Create a PHP script that accepts an index value from the user and retrieves the corresponding element from an array of 5 values. Display the value associated with the provided index.
- 23. Develop a PHP script to perform Basic Array Operations:
  - a. Create an array of your favorite fruits and display the list.
  - b. Add a new fruit to the array and display the updated list of fruits.
  - c. Remove a fruit from the array and display the list after the removal.
  - d. Check if a specific fruit is present in the array.
- 24. Create a PHP script for Array Manipulation:
  - a. Initialize an array with a range of numbers (e.g., 1 to 10).
  - b. Multiply each element in the array by 2 and display the updated array.
  - c. Compute and display the sum of all elements in the array.
  - d. Identify and display the maximum and minimum values within the array.
- 25. Develop a PHP script for Working with an Associative Array:
  - a. Create an associative array where student names are keys and their respective grades are values.
  - b. Add a new student along with their grade to the array.
  - c. Sort and display the student names in alphabetical order.
  - d. Calculate and display the average grade of all students in the array.