

Lab Report Questions

Instructions:

- Create your new repository on GitHub and push your lab solution to GitHub with new branch for each lab set.
- Share your repository to instructor.basanta@gmail.com as a collaborator.
- Print and attach your updated GitHub screenshot into lab set

Format

- Cover (Print)
- GitHub Screenshot
- Lab Question –hand written
- Introduction –hand written
- Syntax and Format –hand written
- Code –hand written
- Output(Print)- With full URL

Lab-1

1. Write a PHP program to create variable with different **datatypes**,
 - a. Print all the data using **echo** and **print**
 - b. Display content of array using **print_r** and **var_dump**
 - c. Display result of **checking data types**.
2. Calculate area of circle taking radius input and defining value of PI as **constant** value.
3. Write a function that takes an integer **minutes** and converts it to **seconds**.
4. Create a function that takes **two** numbers as arguments and returns their **sum**.
5. Write a function that takes the **base** and **height** of a triangle and return its **area**.
6. Create a function that takes the **age** in **years** and returns the **age** in **days**.
7. Create a function that takes **voltage** and **current** and returns the calculated **power**.
8. A farmer is asking you to tell him how many legs can be counted among all his animals.

The farmer breeds three species:

chickens = 2 legs

cows = 4 legs

pigs = 4 legs

Write PHP program to calculate total number of legs of all the animals asking input from user using form.

9. Create a function that takes the number of wins, draws and losses and calculates the number of points a football team has obtained so far.

wins get 3 points
draws get 1 point
losses get 0 points

Write PHP program to calculate total number of point of all the games asking input from user using form.

10. Create a function that takes two strings as arguments and return either true or false depending on whether the total number of characters in the first string is equal to the total number of characters in the second string.
11. Create a function that returns true if an integer is evenly divisible by 5, and false otherwise.
12. Write a function that returns the length of a string. **Make your function recursive.**
13. Write a function that accepts base (decimal), height (decimal) and shape ("triangle", "parallelogram") as input and calculates the area of that shape.
14. Create a function that takes an array and a string as arguments and returns the index of the string.
15. Given an index and an array, return the value of the array with the given index.
16. A typical car can hold **four passengers** and **one driver**, allowing **five people** to travel around. Given **n** number of people, return how many cars are needed to seat everyone comfortably.
17. Write a PHP program to compute the sum of the two given integer values. If the two values are the same, then returns triple their sum.
18. Write a PHP program to get the absolute difference between n and 51. If n is greater than 51 return triple the absolute difference.
19. Write a PHP program to create a new string where 'if' is added to the front of a given string. If the string already begins with 'if', return the string unchanged.

Sample Input:

"if else"
"else"
"if"

Sample Output:

if else
if else
if

20. Write a PHP program to create a new string which is 4 copies of the 2 front characters of a given string. If the given string length is less than 2 return the original string.

Sample Input:

"C Sharp"
"JS"
"a"

Sample Output:

C C C C
JSJSJSJS
a

21. Write a PHP program to create a new string with the last char added at the front and back of a given string of length 1 or more.

Sample Input:
"Red"
"Green"
"1"
Sample Output:
dRedd
nGreenn
111

22. Write a PHP program to create a new string taking the first 3 characters of a given string and return the string with the 3 characters added at both the front and back. If the given string length is less than 3, use whatever characters are there.

Sample Input:
"Python"
"JS"
"Code"
Sample Output:
PytPythonPyt
JSJSJS
CodCodeCod

23. Write a PHP program to check the largest number among three given integers.
24. Write a PHP program to convert the last 3 characters of a given string in upper case. If the length of the string has less than 3 then uppercase all the characters.

Sample Input:
Nepal
Npl
Bca
Bachelor
Sample Output:
NePAL
NPL
BCA
BacheLOR

25. Write PHP Script to display following array into HTML table.

```
$info = [ 'name' => 'Ram Bahadur', 'address' => 'Lalitpur', 'email' => 'info@ram.com',  
'phone' => 98454545, 'website' => 'www.ram.com'];
```

Name	Ram Bahadur
Address	Lalitpur
Email	info@ram.com
Phone	98454545
Website	www.ram.com

26. Write PHP Script to display student mark sheet into table, store data into PHP multidimensional array.

Mark Ledger

SN	Name	Roll	Web Tech II	DBMS	Economics	DSA	Account	Total	Result
1	Rajesh	25	56	89	57	64	98	364	pass
2	hari	5	56	89	57	64	98	364	pass
3	Shyam	6	54	79	57	69	98	357	pass
4	Rita	10	16	89	56	64	98	323	fail
5	Gita	4	56	89	57	69	98	369	pass
6	Sita	24	56	99	57	24	98	334	fail
7	Sita	24	56	99	57	24	98	334	fail
8	Sita	24	56	99	57	24	98	334	fail

Alternate color

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4	Rita	10	16	89	56	64	98	323	fail
5	Gita	4	56	89	57	69	98	369	pass
6	Sita	24	56	99	57	24	98	334	fail
7	Sita	24	56	99	57	24	98	334	fail
8	Sita	24	56	99	57	24	98	334	fail

27. Write PHP Script to create and validate login form with username and password.

28. Write PHP Script to create and login form to implement session and cookie.

29. Write PHP script to upload CV with following details:

- File type: PDF & DOCS
- File size less than 1 MB

30. Write PHP script to upload Profile Image with following details:

- File type: PNG & JPEG
- File size less than 500 KB

31. Write a PHP script to validate and register (store) user with following data.

- Username with minimum 8 character
- Valid email Address
- Validate Date of Birth
- Valid phone length

32. Write a PHP Script to validate, store, list, and update and delete record from database using MySQL database with following fields.

- id,name,rank,status,image,created_by,updated_by,created_at,updated_at

33. Write PHP program to perform CRUD operation for the following tables.

courses

id
title
duration
status
created_at
updated_at

students

id
name

course_id (use foreign key)
fee
rollno
phone
address
dob
status
created_at
updated_at

34. Wrote PHP Script to take user marks using form and generate mark sheet when user input all data. (Please look at last page for mark sheet format)
35. Write PHP script to calculate simple interest using form.
36. Write PHP script to calculate tax using form.

Married

annual income \leq 450000 1% tax
annual income $>$ 450000 and \leq 550000 extra 10% tax for 100000
annual income $>$ 550000 and \leq 750000 extra 20% tax for 200000
annual income $>$ 750000 and \leq 1300000 extra 30% tax for 550000
annual income $>$ 1300000 extra 35% tax for remaining amount

Un-married

annual income \leq 400000 1% tax
annual income $>$ 400000 and \leq 500000 extra 10% tax for 100000
annual income $>$ 500000 and \leq 750000 extra 20% tax for 250000
annual income $>$ 750000 and \leq 1300000 extra 30% tax for 550000
annual income $>$ 1300000 extra 35% tax for remaining amount

If gender is female

- 10% tax discount