

Python Lab Practical Assignment

Basic Level (5 Problems)

1. List Access

Create a list of five fruits and print the third fruit from the list.

2. Tuple Unpacking

You are given a tuple with three values: name, age, and city. Unpack them into separate variables and print each.

3. Modify String

Take a string with extra spaces and mixed case letters. Remove the spaces and convert the text to lowercase.

4. If-Else Statement

Write a program to check if a number is positive, negative, or zero.

5. Create and Call a Function

Create a function that prints "Hello, welcome to Python Lab!" and call it.

Medium Level (10 Problems)

6. List Update

Create a list of student names. Change the second name to "Ali".

7. Reading List using Loops

Create a list of numbers and print each number multiplied by 2 using a loop.

8. List Comprehension

Create a new list that contains the square of all even numbers from 1 to 10.

9. Use of String Methods

Take a string sentence, replace the word "bad" with "good", and split the sentence into words.

Python Lab Practical Assignment

10. Tuple Conversion and Update

Convert a tuple to a list, change one element, and convert it back to a tuple.

11. Dictionary Manipulation

Create a dictionary with keys "name" and "age". Add a new key "grade" and change the value of "age".

12. If-Elif-Else with Logical Operator

Ask user for age and student status. If age > 18 and student is true, print "Eligible".

13. Function with Default Parameter

Create a function that takes a name and prints "Welcome, name!". If no name is given, print "Welcome, Guest!"

14. Passing List to Function

Write a function that accepts a list of numbers and prints the sum of all numbers.

15. Use Escape Characters

Print a sentence that includes quotes, new line, and a tab space using escape characters.

Advanced Level (5 Problems)

16. Nested If with List and String

Create a list of 5 student names. If the name starts with "A", convert it to uppercase and print it.

17. Function Returning Dictionary

Create a function that takes name, age, and subject as arguments and returns them in a dictionary format.

18. String Formatting and Conditional Check

Ask user to enter marks of 3 subjects. Use a function to calculate average and print a formatted message with grade using if-elif.

Python Lab Practical Assignment

19. Join Lists and Sort

Create two lists of numbers, merge them, sort the result in descending order, and print the final list.

20. Function with List Comprehension & Return

Write a function that takes a list of numbers, removes all odd numbers using list comprehension, and returns the new list.