

Python Assignment Report

This assignment covers operators, strings, and lists through a variety of tasks on basic fundamentals of Python. The arithmetic, comparison, and logical operations in the operators portion, which helped me better grasp how Python handles conditions and calculations. The string exercises featured experimenting with string formatting and substring searches, as well as discovering string lengths, reversing strings, and changing the string cases. In addition to adding, deleting, sorting, and slicing list parts All things considered, the assignment strengthened my comprehension of Python's fundamental features and enhanced my capacity to produce clear, concise code.

Approach

1.Operators

- **Question 1 Arithmetic Operators :-** In this question I wrote a code which takes 2 inputs from the user to carry out several fundamental arithmetic operations, including addition, subtraction, multiplication, division, exponential and floor division.
- **Question 2 Comparison Operators :-** in this question the comparison operators are used which finds whether a number is greater than the other one or not.
- **Question 3 Logical Operators :-** In this question the user enter three boolean input and the input is compared with each other and printed with the logical operators AND, OR & NOT

2.Strings

- **Question 4 String Manipulation :-** In this question the user inputs string and various operations are

performed such as printing first element, last element and reversing the list

- **Question 5 String formatting :-** In this question the user inputs their name and age and a customised message is printed.
- **Question 6 Substring Search :-** In this question the user inputs a sentence and then enters the word which it wants to find and the result is displayed in terms of the index on from which the word is starting.

3.List

- **Question 7 List Operation :-** in this question the for loop is used and range is set 5 and input is taken from the user for 5 times in form of integer and operations such as sum, maximum number, minimum number are performed.
- **Question 8 List Manipulation :-** In this question the list is created of the names of the fruit and an element is added and one element is removed from the list.
- **Question 9 Sorting A List :-** in this question while loop is used and 5 values are taken as an input from the user and the values are stored in a list and then ascending and descending operations are performed on the list.
- **Question 10 List Slicing :-** in this question a list is taken containing ten elements and operations are performed on the list which prints first 5 elements, last five elements, and 2nd to 7th element.

Key Learning

1. Operators: I learned how to effectively carry out a variety of calculations and checks using arithmetic, comparison, and logical operators.
2. String Manipulation: By investigating various approaches to handling and processing string data, I enhanced my proficiency in manipulating strings using built-in Python functions.
3. List Operations: I became more familiar with list operations, such as how to make, edit, sort, and cut lists. I also learned how to work with nested structures, which are used to store more complicated data.

GitHub link:- <https://github.com/MahirMavani/Python-Assignment->