Siddaganga Institute of Technology, Tumkur
Department of Electronics and Communication
Introduction to Python programming (PLC2) Academic Year: 2024-25
Assignment 1

1. Explain the different standard data types used in Python programming language with example.
2. Illustrate the usage of str(), int() and float() functions with suitable examples.
3. Illustrate string concatenation and replication with an example for each
4. Differentiate between break and continue statements in Python programming language.
5. Explain the if/else statement with its general form and flow chart.
6. Summarize the precedence of mathematical operators in Python and illustrate with an example.
7. With syntax, explain import statements in Python.
8. Describe different scenarios of local and global scope with local and global variables with illustrative example programs for each scenario.
9. Illustrate with examples how to define and call functions in python?
10. Distinguish between if-else, if-elif-else, for, and while control statements with illustrative code snippets and How the for loop along with range function works in python? Illustrate an example program.
11. Explain the working of any four methods associated with the list data type.
12. What are mutable and immutable data types? Give examples.
13. Explain the difference between lists and tuples in Python with suitable examples.
14. Explain how to assign and copy the data in Python lists.
15. Explain the augmented assignment operators with examples.
16. Differentiate between lists and tuples and also discuss the functions that are not supported by tuples.
17. Define lists with illustrative examples and Justify the following with illustrative example over the list, i) Indexing ii) Slicing iii) random.choice() and random.shuffle() v) append() and remove() vi) sort()
18. Explain the following list methods with illustrative example code. Append(), Insert(), Remove()
19. Differentiate between list, tuples and dictionaries
20. What are mutable and immutable data types? Give examples.
21. Explain the syntax of tuple data type with an example. How do you convert lists to tuples and vice versa? Give an example.
22. Discuss the functions that are not supported by tuples.
23. Discuss four built in functions of dictionary data type.
24. Explain the usage of following built-in string methods: Join(), split(), ljust(), rjust(), center(), strip(), rstrip(), lstrip(), startswith(), endswith(), upper() and lower()
25. Explain splitting strings with the partition() method with an example.
26. Briefly explain the function of pyperclip module in python with suitable code.