GLS UNIVERSITY
Faculty of Computer Applications & IT
Integrated MCA

221601501 Introduction to Python

Theory Assignment Unit – 2

Q – 1 Answer the following:

1. Explain different conditional statements in Python.
2. Explain different looping statements in Python.
3. Explain range function in detail with example.
4. What is a List? Explain with syntax and example.
5. What is a Tuple? Explain with syntax and example.
6. What is a Dictionary? Explain with syntax and example.
7. What is a Set? Explain with syntax and example.
8. Differentiate: Lists and Tuples
9. Differentiate: Set and Frozenset

Q – 2 Fill in the blanks:

1. The _____ statement is used to test a single condition in Python.
2. To check multiple conditions, you can use the _____ statement.
3. In if-else-elif _____ statement is executed when none of the previous conditions are true.
4. The condition in an `if` statement is followed by a _____sign
5. Python relies on _____ to define the scope of the conditional blocks.
6. _____ operator is used to check if two values are equal.
7. The _____ operator is used to check if a value is not equal to another value.
8. To check if a value is greater than another value, you use the _____ operator.
9. The _____ loop is used to iterate over a sequence (like a list, tuple, or string).
10. You can use the _____ statement to exit a loop prematurely.
11. The _____ statement is used to skip the current iteration and move to the next one.
12. The _____ function is commonly used to create a sequence of numbers in a `for` loop.
13. In a `for` loop, the _____ keyword is used to iterate over elements.
14. A `for` loop with the syntax `for i in range(5):` will iterate _____ times.
15. Lists are created using _____ brackets.
16. Tuples are created using _____ brackets.
17. Dictionaries store data in _____ pairs.
18. Sets are created using _____ brackets.
19. To access the third element of a list named my_list, you would use _____.
20. Tuples are _____, meaning their elements cannot be changed after creation.
21. The method to add an element to a set is _____.
22. The method to update a dictionary with another dictionary is _____.
23. The method to remove an element from a list by value is _____.
24. Sets do not allow _____ elements.

Q – 3 Explain following methods of lists in Python with syntax and examples:

1. append( )
2. extend( )
3. insert( )
4. remove( )
5. pop( )
6. clear( )
7. index( )
8. count( )
9. sort( )
10. reverse( )
11. copy( )
12. len( )

Q – 4 Explain following tuple functions in Python with syntax and examples:

1. len( )
2. sum( )
3. max( )
4. min( )

Q – 5 Explain following dictionary functions in Python with syntax and examples:

1. clear()
2. copy()
3. fromkeys()
4. get()
5. items()
6. keys()
7. pop()
8. popitem()
9. setdefault()
10. update()
11. values()

Q – 6 Explain following set functions in Python with syntax and examples:

1. add()
2. clear()
3. copy()
4. difference()
5. difference_update()
6. discard()
7. intersection()
8. intersection_update()
9. isdisjoint()
10. issubset()
11. issuperset()
12. pop()
13. remove()
14. symmetric_difference()
15. symmetric_difference_update()
16. union()
17. update()