**Day-2 Afternoon Assessment**

1. numbers = (10,20,30,40,50)

print("First element:", numbers[0])

print("Last element:", numbers[-1])

o/p:

First element: 10

Last element: 50

2. my\_tuple = (10,20,30,40,50)

element = int(input("Enter the element to search:"))

if element in my\_tuple:

print(f"{element} exists in the tuple.")

else:

print(f"{element} does not exist in the tuple.")

o/p: Enter the element to search:20

20 exists in the tuple.

3.By using len() function we can find the length of a tuple.

4. my\_tuple = (10,20,30,40,50)

my\_list = list(my\_tuple)

print("Converted list:", my\_list)

o/p: Converted list: [10, 20, 30, 40, 50]

5. my\_tuple = (1, 2, 3)

repeated\_tuple = my\_tuple \* 3

print("Repeated tuple:", repeated\_tuple)

o/p: Repeated tuple: (1, 2, 3, 1, 2, 3, 1, 2, 3)

6.It will raise a TypeError if you try to change an element of a tuple.

Example:

my\_tuple = (10, 20, 30)

my\_tuple[1] = 99

o/p: TypeError

7. tuple1 = (1, 2, 3)

tuple2 = (4, 5, 6)

combined\_tuple = tuple1 + tuple2

print("concatenated tuple:", combined\_tuple)

o/p: concatenated tuple: (1, 2, 3, 4, 5, 6)

8. my\_tuple = (1, 2, 3, 4, 5)

first\_three = my\_tuple[:3]

print("First three elements:", first\_three)

o/p: First three elements: (1, 2, 3)

9. my\_set = {"car", "bike"}

print("set elements:")

for item in my\_set:

print(item)

o/p:

set elements:

car

bike

10. my\_set = {"car", "bike"}

new\_items = ["train","bus"]

my\_set.update(new\_items)

print("Updated set:", my\_set)

o/p: Updated set: {'car', 'bus', 'train', 'bike'}

11. my\_set = {"car", "bike"}

element = input("Enter an element to check:")

if element in my\_set:

print(f"'{element}' is present in the set.")

else:

print(f"'{element}' is not present in the set.")

o/p:

Enter an element to check:car

'car' is present in the set.

12. set1 = {1, 2, 3, 4}

set2 = {3,4,5}

difference = set1.difference(set2)

print("Difference (set1 - set2):", difference)

o/p: Difference (set1 - set2): {1, 2}

13.The set of elements that are in either of the sets but not in both.

set1 = {1, 2, 3, 4}

set2 = {3,4,5, 6}

sym\_diff = set1.symmetric\_difference(set2)

print("Symmetric difference:",sym\_diff)

o/p: Symmetric difference: {1, 2, 5, 6}

14.No, set cannot contain duplicate elements.

Example:

my\_set = {1,2,2,3,4,4,4}

print(“Set contents:”, my\_set)

o/p: Set contents: {1,2,3,4}

15.By using .clear() method.

16. original\_set = {"apple", "banana"}

copied\_set = original\_set.copy()

print("Original set:", original\_set)

print("Copied set:", copied\_set)

o/p:

Original set: {'apple', 'banana'}

Copied set: {'apple', 'banana'}

17. a = 5

b = 5

print("Equal" if a == b else "Not Equal")

o/p: Equal

18. True

19.By using <= operator.

20. a = input("Enter first string:")

b = input("Enter second string:")

print("Equal" if a == b else "Not Equal")

o/p:

Enter first string:hello

Enter second string:hello

Equal

21. > checks if the left value is strictly greater than the right.

>= checks if the left value is greater than or equal to the right.

22. a = 10

b = 20

print("Not equal" if a != b else "Equal")

o/p: Not equal

23. a = input("First string:")

b = input("Second string:")

print("Equal length" if len(a) == len(b) else "Not Equal length")

o/p:

First string:Hi

Second string:Amitha

Not Equal length

24. a = 10

b = 5

print("First is greater" if a>b else "First is not greater")

o/p: First is greater

25.True

26. n = 50

print("Valid" if n > 0 and n < 100 else "Invalid")

o/p: Valid

27. ch = input ("Enter a letter:").lower()

print("Vowel" if ch in 'aeiou' else "Consonant")

o/p:

Enter a letter:e

Vowel

28. not operator reverses the truth value of an expression.

Example:

x = True

print(not x) o/p:False

29. n = int(input())

print("Divisible" if n % 3 == 0 or n % 5 == 0 else "Not divisible")

o/p:

15

Divisible

30. n = int(input())

print("In range" if n >= 50 and n <= 100 else "Out of range")

o/p:75 In range

31. a, b, c = 5, 10, False

print("OK" if(a < b or b < a) and not c else "Not OK")

o/p: OK

32. s = input()

print("Empty" if not s else "Not empty")

33. n = int(input())

Print(n \* n)

o/p:

5

25

34. Using float()

n = float(input())

print(n)

o/p: 3.14

35. nums = list(map(int, input().split()))

Print(max(nums))

36. s = input()

print(len(s))

37. a,b = map(int, input().split())

print(a \* b)

o/p: 4 5

38. n = int(input())

print(“Positive” if n > 0 else “Negative” if n < 0 else “Zero”)

o/p: -3

Negative

39.name = input()

print(name.upper())

o/p: amitha

AMITHA

40.s = input()

Print(len(s.split()))