

# finger↑tips

## ASSIGNMENT QUESTIONS

1. One-word answers( $1*5=5$ )
2. Conditionals( $2*10=20$ )
3. Lists( $2*10=20$ )
4. Tuple( $2*10=20$ )
5. Sets( $2*10=20$ )
6. Dictionary( $2*10=20$ )
7. Operators( $1*5=5$ )
8. for-loop( $3*10=30$ )
9. while-loop( $3*10=30$ )
10. Functions( $3*10=30$ )

Total=200 Marks

### One-word answers, 1-Mark( $1*5=5$ )

Q1. Which of the following words cannot be used as a variable name in Python?

1. for
2. while
3. class
4. All of the above

Q2. What will be the output of the following code:

```
x = range(6) for n in x: pass print(n)
```

Q3. What is the output of the following code:

```
x = [5,6,7,8,9] print(4 in x)
```

Q4. What is the output of the following code:

```
x = {"name" : "John", "age" : 36}; print(x["age"])
```

Q5. Which of these are correct identifier names:

1. \_python
2. python12\_
3. 12\_python
4. python@12
5. python\_12

## Conditionals, 2-Marks(2\*10=20)

Q1. What will be the output of following code?

```
x = 15 if x % 2 == 0: print("x is even") else: print("x is odd")
```

Q2. What will be the output of following code?

```
x = 5 if x > 0: print("Positive")
```

Q3. What will be the output of following code?

```
x = 0 if x > 0: print("Positive") elif x < 0: print("Negative") else: print("Zero")
```

Q4. What will be the output of following code?

```
x = [1, 2, 3] if 2 in x: print("m") else: print("2 is not in the list")
```

Q5. What will be the output of following code?

```
x = 5 if x > 0 or x < -5: print("x is either greater than 0 or less than -5") else: print("x is not greater than 0 or less than -5")
```

Q6. What will be the output of following code?

```
x = True if not x: print("x is False") else: print("x is True")
```

Q7. What will be the output of following code?

```
x = 5 y = 10 z = 15 if x < y < z: print("x is less than y and y is less than z") else: print("x is greater than or equal to y or y is greater than or equal to z")
```

Q8. What will be the output of following code?

```
x = "python" if x.startswith("p") and x.endswith("n"): print("x starts with p and ends with n") else: print("x does not start with p or does not end with n")
```

Q9. What will be the output of following code?

```
x = ['Python', 'Machine Learning', 'NLP'] if x[0] == "Python" and x[-1] == "NLP": print("The first or last item in the list is python and NLP") else: print("The first or last item in the list is not python and NLP")
```

Q10. What will be the output of following code?

```
x = "Hello" if x.islower() == True: print("x is not all lowercase") else: print("x is all lowercase")
```

## Lists, 2-Marks(2\*10=20)

Q1. Write a code to append 'Deep Learning' in list courses=['Python', 'Machine Learning', 'NLP']

In [ ]:

Q2. Write a code to insert 'Deep Learning' after 'Python' in list courses=['Python', 'Machine Learning', 'NLP']

In [ ]:

Q3. Write a code to remove 'Deep Learning' in list courses=['Python', 'Deep Learning', 'Machine Learning', 'NLP']

In [ ]:

Q4. What is the length of list, courses=['Python', 'Deep Learning', 'Machine Learning', 'NLP']

In [ ]:

Q5. Write a code to delete last item of the list, courses=['Python', 'Deep Machine Learning', 'NLP']

In [ ]:

Q6. Write a code to sort the items of the list, courses=['Python', 'Deep Learning', 'Machine Learning', 'NLP']

In [ ]:

Q7. Write a code to reverse the items of the list, courses=['Python', 'Deep Learning', 'Machine Learning', 'NLP']

In [ ]:

Q8. Write a code to find whether 'NLP' is in the list, courses=['Python', 'Deep Learning', 'Machine Learning', 'NLP']

In [ ]:

Q9. Write a code to count number of 'NLP' in the list, courses=['Python', 'NLP', 'Deep Learning', 'NLP', 'Machine Learning', 'NLP']

In [ ]:

Q10. Write a code to clear the list, courses=['Python', 'Deep Learning', 'Machine Learning', 'NLP']

In [ ]:

## Tuples, 2-Marks(2\*10=20)

Q1. write a code to concatenate 2 tuples, t1 = (23, 'python', 'coders') & t2 = (45.78, 'ML', 'NLP')

In [ ]:

Q2. Write a code to thrice the elements of tuple, t = (23, 'python', 'coders')

In [ ]:

Q3. Write a code to print elements of tuple, t = (1, 2, 3, 4, 5, 6, 7, 8, 9, 10) from index 3 to 9 with step size of 2.

In [ ]:

Q4. Write a code to check whether 'python' is in the tuple, t = (23, 'python', 'coders') or not.

In [ ]:

Q5. Write a code to find length of tuple, t = (1, 2, 3, 4, 5, 6, 7, 8, 9, 10)

In [ ]:

Q6. Write a code to print smallest & largest number from t = (1, 2, 3, 4, 5, 6, 7, 8, 9, 10)

In [ ]:

Q7. Write a code to convert tuple, t = (23, 'python', 'coders') into list.

In [ ]:

Q8. Write a code to find index of element 'coders' in tuple, t = (23, 'python', 'coders')

In [ ]:

Q9. Write a code to sort the tuple, t = (1, 2, 3, 4, 5, 6, 7, 8, 9, 10) in descending order

In [ ]:

Q10. Write a code to count number of times 'ML' in tuple, t=('python', 'ML', 'ML', 'DL', 'ML', 'NLP')

In [ ]:

## Sets, 2-Marks(2\*10=20)

Q1. Write a code to add elements 'ML', 'DL' and 'NLP' one-by-one in a set, and print the set so formed.

In [ ]:

Q2. Write a code to remove 'DL' from set my\_set={'DL', 'NLP', 'ML'}

In [ ]:

Q3. Write a code to check whether 'python' and 'NLP' are in set, my\_set= {'DL', 'NLP', 'ML'} or not.

In [ ]:

Q4. Write a code to find common elements from sets, set1 = {'python',

'ML', 'DL'} and set2 = {'python', 'NLP', 'DL', 'SQL'}

In [ ]:

Q5. Write a code to find union of sets, set1 = {'python', 'ML', 'DL'} and set2 = {'python', 'NLP', 'DL', 'SQL'}

In [ ]:

Q6. Write a code to find those elements which are present in set1 = {'python', 'ML', 'DL'} but not in set2 = {'python', 'NLP', 'DL', 'SQL'}

In [ ]:

Q7. Write a code to find those elements which are present in set2 = {'python', 'NLP', 'DL', 'SQL'} but not in set1 = {'python', 'ML', 'DL'}

In [ ]:

Q8. Write a code to find those elements which are present in set1 = {'python', 'ML', 'DL'} but not in set2 = {'python', 'NLP', 'DL', 'SQL'} & vice-versa.

In [ ]:

Q9. Write a code to find the length of set, s = {'python', 'NLP', 'DL', 'SQL'}

In [ ]:

Q10. Write a code to clear all the elements of s = {'python', 'NLP', 'DL', 'SQL'}

In [ ]:

## Dictionary, 2-Marks(2\*10=20)

Q1. Write a code to check whether the key, 'sub6' is available in dictionary, my\_dict = {'sub1':'python', 'sub2':'ML', 'sub3':'SQL', 'sub4':'DL', 'sub5':'NLP'} or not

In [ ]:

Q2. Write a code to remove 'sub3' from my\_dict = {'sub1':'python', 'sub2':'ML', 'sub3':'SQL', 'sub4':'DL', 'sub5':'NLP'}

In [ ]:

Q3. Write a code to iterate over the keys of a dictionary, my\_dict = {'sub1':'python', 'sub2':'ML', 'sub3':'SQL', 'sub4':'DL', 'sub5':'NLP'}

In [ ]:

Q4. Write a code to obtain a list of all the values in dictionary, my\_dict = {'sub1':'python', 'sub2':'ML', 'sub3':'SQL', 'sub4':'DL', 'sub5':'NLP'}

In [ ]:

Q5. Write a code to merge two dictionaries dict1 = {"a": 1, "b": 2} and dict2 = {"c": 3, "d": 4}

In [ ]:

Q6. Write a code to make copy of dictionary, my\_dict = {'sub1':'python', 'sub2':'ML', 'sub3':'SQL', 'sub4':'DL', 'sub5':'NLP'}

In [ ]:

Q7. Write a code to access 'dl' from my\_dict = {1:'one' , 2:'two' , 'A': ['python', 'sql', 'ml'], 'B':{'course1':'dl', 'course2':'nlp'}}

In [ ]:

Q8. Write a code to find cubes from numbers 11 to 20 using dictionary comprehension.

In [ ]:

Q9. Write a code to clear all items of the dictionary, my\_dict = {'sub1':'python', 'sub2':'ML', 'sub3':'SQL', 'sub4':'DL', 'sub5':'NLP'}

In [ ]:

Q10. Write a code to delete dictionary, my\_dict = {'sub1':'python', 'sub2':'ML', 'sub3':'SQL', 'sub4':'DL', 'sub5':'NLP'}

In [ ]:

## Operators, 1-Mark(1\*5=5)

Q1. What will be the output of following code?

```
x = [1, 2, 3] y = [1, 2, 3] print(x is y)
```

In [ ]:

Q2. What will be the output of following code?

```
x = [1, 2, 3] y = [1, 2, 3] print(x == y)
```

In [ ]:

Q3. What will be the output of following code?

```
x = True y = False print(x and y)
```

In [ ]:

Q4. What will be the output of following code?

```
x = 5 print(x is 5)
```

In [ ]:

Q5. What will be the output of following code?

```
x = [1, 2, 3] print(4 not in x)
```

In [ ]:

## For-loop, 3-Mark(3\*10=30)

Q1. Write a code to print squares of all the numbers from 21 to 30 using for-loop.

In [ ]:

Q2. Write a code to print only odd numbers from 31 to 50 using for-loop.

In [ ]:

Q3. Write a code to print all the elements of list, post = ['data analyst', 'data scientist', 'data engineer'] using for-loop.

In [ ]:

Q4. Write a code to print all the elements except 'ML' from list, my\_list = ['data analyst', 'data scientist', 'data engineer', 'ML', 'python', 'DL'] using for-loop.

Hint : use continue statement

In [ ]:



Q5. Write a code to print all the elements from list, my\_list = ['data analyst', 'data scientist', 'data engineer', 'ML', 'python', 'DL'] using for-loop but breaks the loop when 'python' occurs.

Hint : use break statement

In [ ]:

Q6. Write a code to print only even numbers from list, numbers = [24, 34, 65, 34, 77, 98, 67] using for-loop.

In [ ]:

Q7. Write a code to print table of 34 using for-loop.

In [ ]:

Q8. Use a for loop to calculate the sum of list, numbers = [56, 45, 89].

In [ ]:

Q9. Use a for loop to remove all the vowels from string, string = "Hello, World!".

In [ ]:

Q10. Use a for loop to count the number of occurrences of a specific character('l') in string, string = "Hello, World!"

In [ ]:

## While-loop, 3-Mark(3\*10=30)

Q1. Use a while loop to print numbers from 0 to 50 with step-size of 5.

In [ ]:

Q2. Use while loop to print all the multiples of 3 from 1 to 30.

In [ ]:

Q3. Use a while loop to print the numbers 11 to 20 in Python?

In [ ]:

Q4. Use a while loop to print the numbers in reverse order from a given number(say 10)?.

In [ ]:

Q5. Write a code to find largest number from the list, numbers = [56, 42, 67, 43, 99, 87] using while loop.

In [ ]:

Q6. Write a code to find sum of all the elements of the list, numbers = [56, 42, 67, 43, 99, 87] using while loop.

In [ ]:

Q7. Use while loop to print table of 25.

In [ ]:

Q8. Use while loop to keep a program running until the user enters a specific command('bye') to quit.

In [ ]:

Q9. Separate even and odd numbers from a list, numbers = [56, 42, 67, 43, 99, 87, 88] using while-loop and append them in two different lists num\_even and num\_odd.

In [ ]:

Q10. Use while-loop to find factorial of 8.

In [ ]:

## Functions, 3-Mark(3\*10=30)

Q1. Write a function to reverse a string('hello').

In [ ]:

Q2. Write a function to check if a given year is a leap year or not.

In [ ]:

Q3. Write a function to remove duplicates from a list([56, 45, 32, 32, 45]).

In [ ]:

Q4. Write a function to calculate power of a number raised to other. E.g.-

$a^b$ .

In [ ]:

Q5. Write a function to calculate area and circumference of a circle.

In [ ]:

Q6. Write a function to calculate area and perimeter of a rectangle.

In [ ]:

Q7. Write a function to find the sum of the digits of an integer using a while loop.

In [ ]:

Q8. Write a function to display all integers within the range 10-30 whose sum of digits is an even number.

In [ ]:

Q9. Write a function to check whether the given integer is a multiple of both 5 and 7.

In [ ]:

Q10. Write 4 different functions to make simple calculator(+, -, \*, /).

In [ ]:

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