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**INTERNSHIP=34**

**WORKSHEET 2**

**WORKSHEET 2 PYTHON**

**Q1 to Q7 have only one correct answer. Choose the correct option to answer your question.**

1. Which of the following is not a core datatype in python?

A) list B) struct

C) tuple D) set

ANSWER:-B) struct

2. Which of the following is an invalid variable name in python?

A) \_init\_ B) no\_1

C) 1\_no D) \_1

ANSWER:-C) 1\_no

3. Which one of the following is a keyword in python?

A) in B) \_init\_

C) on D) foo

ANSWER:-A) in

4. In which of the following manner are the operators of the same precedence executed in python?

A) Left to Right B) BODMAS

C) Right to Left D) None of these

ANSWER:- A) Left to Right

5. Arrange the following in decreasing order of the precedence when they appear in an expression in python? i) Multiplication ii) Division iii) Exponential iv) Parentheses

A) iii – iv – ii – i B) iii – iv – i – ii

C) iv – iii – ii – i D) iii – ii – i – iv

Answer:-C) iv – iii – ii – i

6. (28//6)\*\*3/3%3 = ?

A) 7.1111… B) 0

C) 0.3333… D) 1

Answer:-C) 0.3333…

7. a = input(“Enter an integer”). What will be the data type of a?

A) int B) str

C) float D) double

Answer:-B) str

**Q8 and Q10 have multiple correct answers. Choose all the correct options to answer your question.**

8. Which of the following statements are correct?

A) Division and multiplication have same precedence in python

B) Python’s operators’ precedence is based on PEDMAS

C) Python’s operators’ precedence is based on VBODMAS

D) In case of operators’ having the same precedence, the one on the left side is executed first.

Answer:-A) Division and multiplication have same precedence in python

D) In case of operators’ having the same precedence, the one on the left side is executed first.

9. Which of the following is(are) valid statement(s) in python?

A) abc = 1,000,000 B) a b c = 1000 2000 3000

C) a,b,c = 1000, 2000, 3000 D) a\_b\_c = 1,000,000

Answer:-C) a,b,c = 1000, 2000, 3000

D) a\_b\_c = 1,000,000

10. Which of the following is not equal to x16 in python?

A) x\*\*4\*\*4 B) x\*\*16

C) x^16 D) (x\*\*4)\*\*4

ANSWER:-A) x\*\*4\*\*4

B) x\*\*16

D) (x\*\*4)\*\*4

**Q11 to Q13 are subjective questions, answer them briefly**

1. Differentiate between a list, tuple, set and dictionary.

ANSWER:-In Python, a list, tuple, set, and dictionary are all different data types used to store collections of values.

List:

* A list is a mutable sequence of values.
* Lists are enclosed in square brackets [] and each value is separated by a comma.
* Lists are ordered, meaning the elements are stored in a specific order.
* Lists are mutable, so you can add, remove or modify elements after the list is created.
* Example: my\_list = [1, 2, 3, 'four', 'five']

Tuple:

* A tuple is an immutable sequence of values.
* Tuples are enclosed in parentheses () and each value is separated by a comma.
* Tuples are ordered, meaning the elements are stored in a specific order.
* Tuples are immutable, so once a tuple is created, its elements cannot be modified.
* Example: my\_tuple = (1, 2, 3, 'four', 'five')

Set:

* A set is an unordered collection of unique values.
* Sets are enclosed in curly braces {} or can be created using the set() function.
* Sets do not allow duplicate values, and the elements are unordered, meaning they are not stored in any particular order.
* Sets are mutable, so you can add or remove elements after the set is created.
* Example: my\_set = {1, 2, 3, 'four', 'five'}

Dictionary:

* A dictionary is an unordered collection of key-value pairs.
* Dictionaries are enclosed in curly braces {} and each key-value pair is separated by a colon (:), and each pair is separated by a comma.
* Dictionaries are unordered, meaning the key-value pairs are not stored in any particular order.
* Dictionaries are mutable, so you can add, remove or modify key-value pairs after the dictionary is created.
* Example: my\_dict = {'name': 'John', 'age': 30, 'city': 'New York'}
* In summary, lists and tuples are ordered, but lists are mutable while tuples are immutable. Sets and dictionaries are unordered, but sets only contain unique values while dictionaries contain key-value pairs.

1. Are strings mutable in python? Suppose you have a string “I+Love+Python”, write a small code to replace ‘+’ with space in python.

ANSWER:-No, strings are immutable in Python, meaning once a string is created, it cannot be changed.

To replace ‘+’ with space in the given string “I+Love+Python”, we can use the **replace()** method as shown below:

No, strings are immutable in Python, meaning once a string is created, it cannot be changed.

To replace ‘+’ with space in the given string “I+Love+Python”, we can use the **replace()** method as shown below:

my\_string = "I+Love+Python"

new\_string = my\_string.replace('+', ' ')

print(new\_string)

1. What does the function **ord()** do in python? Explain with an example. Also, write down the function for getting the data type of a variable in python.

ANSWER:-The **ord()** function in Python returns the Unicode code point of a given character. In other words, it returns the integer representation of the Unicode character.

Here is an example code snippet to demonstrate the use of **ord()**

>>> ord('A')

65

>>> ord('a')

97

>>> ord('#')

35

In the above example, **ord()** returns the Unicode code point of the given characters **'A'**, **'a'**, and **'#'**.

To get the data type of a variable in Python, we can use the built-in function **type()**. Here is an example:

>>> x = 10

>>> type(x)

<class 'int'>

>>> y = 'hello'

>>> type(y)

<class 'str'>

>>> z = [1, 2, 3]

>>> type(z)

<class 'list'>

In the above example, **type()** returns the data type of the variables **x**, **y**, and **z**