

## **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

Ans: B

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

- A) \_init\_
- B) no\_1
- C) 1\_no
- D) \_1

Ans: C

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

- A) in
- B) \_init\_
- C) on
- D) foo

Ans: A

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

Ans: B

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

Ans: A

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

- A) 7.1111...
- B) 0
- C) 0.3333...
- D) 1

Ans: C

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

- A) int
- B) str
- C) float
- D) double

Ans: B

**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.

Ans: A & D

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`

Ans: C

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`

Ans: C

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

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

Ans: In python there are four type of data structures are used to store and manipulate data. These are list, tuple, set and dictionary.

The difference between them is following:

List:

- It is created using square bracket `[]`.
- It can hold any type of data like integer, string, etc.
- It is mutable i.e. we can add, delete or make changes in data.
- The elements can be accessed using their index position.
- Ex: - `list1 = [1,2,3,'sun','night']`

tuple:

- It is created using parentheses `()`.

- It is immutable i.e. we can not make changes in data once it is created.
- It can contains duplicate values.
- The elements can be accessed using their index position.
- Ex: - `tpl = (1,2,3,'Moon','Earth')`

set:

- These are created using curly braces {}.
- It is mutable i.e. we can add or remove data.
- It contains unique values only if we entered duplicate values it will show only one.
- We can not access elements using their index position.
- Ex: - `st = {1,4,5,'Jupiter','Mars'}`

dictionary:

- These are also created using curly braces{} but it is different from set.
- They contains key-value pairs.
- The keys should be unique.
- Elements are accessible using key name.
- Elements are mutable i.e we can add, remove and make changes in them.
- Ex: - `my_dict = {'Earth' : 'Life', 'Mars': 'Red', 'Jupiter': 'Big'}`

12. Are strings mutable in python? Suppose you have a string "I+Love+Python", write a small code to replace '+' with space in python.

Ans: Strings are not mutable in python it's elements can't be changed once created.

Code to replace '+' with space of string "I+Love+Python" :-

```
string1 = 'I+Love+Python'
new_string = string1.replace('+', ' ')
print(new_string)
```

We have used replace method to replace '+' with space " " .

13. 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.

Ans: ord() function returns the unicode value of given single string in python. It don't take more than one character.

For example: If we want to see the Unicode value of 'A' then we type ord('A'), it will return 65. But if we will give it more than one character like ord('Hello'), it will give TypeError.

Function for getting the data type of a variable we use type() function, the syntax for writing it is, type(variable\_name).

Ex: - d = 'Hello'

```
>>>print(type(d))
```

```
>>><class 'str'>
```