

# WORKSHEET 2

## PYTHON

**Q1 to Q8 have only one correct answer. Choose the correct option to answer your question.**

Q1. B) struct

Q2. C) l\_no

Q3. A) in

Q4. B) BODMAS

Q5. A) iii – iv – ii – i

Q6. C) 0.3333...

Q7. A)  $x^{**4**4}$

Q8. B) str

**Q9 and Q10 have multiple correct answers. Choose all the correct options to answer your question.**

**Q9.**

A) Division and multiplication have same precedence in python

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

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

**Q10.**

B) a b c = 1000 2000 3000

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

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

Ans:-

LIST	SET	DICTIONARY	TUPLE
Lists is Mutable	Set is Immutable	Dictionary is Mutable	Tuple is Immutable
It is Ordered collection of items	It is Unordered collection of items	dictionaries are unordered sets.	It is Ordered collection of items
Items in list can be replaced or changed	Items in set cannot be changed or replaced	dictionaries are accessed via keys and not via their position	Items in tuple cannot be changed or replaced

Q12. 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 immutable.

```
string="I+Love+Python"
new_string = string.replace("+", " ")
print(new_string)
```

Output: I Love Python

Q13. What does the function **ord()** do in python? Explain with example. Also, write down the function for getting the datatype of a variable in python.

Ans: The ord() function returns the number representing the unicode code of a specified character.

```
x=ord("c")
print(x)
```

Output :99

Datatype:

```
string="I+Love+Python"
new_string = string.replace("+", " ")
print(new_string)

type(new_string)
```

Output:

```
I Love Python
Str
```

**Q14 and Q15 are programming questions. Answer them in Jupyter Notebook.**

Q14. Write a python program to solve a quadratic equation of the form  $ax^2 + bx + c = 0$ . Where a, b and c are to be taken by user input. Handle the erroneous input, such as ‘a’ should not be equal to 0.

Separate python file

Q15. Write a python program to find the sum of first ‘n’ natural numbers without using any loop. Ask user to input the value of ‘n’.

Separate python file