

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?

ANS.

B) struct

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

ANS.

A) _init

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

ANS.

A) in

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

ANS.

B) BODMAS

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

ANS.

C) iv – iii – ii – i

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

ANS.

B) 0

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

ANS.

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?

ANS.

A) Division and multiplication have same precedence in python

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

ANS.

A) `abc = 1,000,000`

ASSIGNMENT

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

ANS.

C) `x^16`

Q11 to Q13 are subjective questions, answer them briefly

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

ANS.

What is a List?

The lists don't always need to be homogeneous in nature. Thus, it is one of the most powerful tools used in the Python language.

What is a Tuple?

The difference is that a tuple, unlike a list, is immutable. The lists, on the other hand, are mutable.

What is a Set?

The sets are an unordered collection of data types. These are mutable, iterable, and do not consist of any duplicate elements

What is a Dictionary?

In Python, the dictionary refers to a collection (unordered) of various data types. We use these for storing data values such as maps, and unlike other data types capable of holding only one value in the form of an element, a dictionary can hold the **key: value** pair.

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

```
text1 = ["I+Love+Python"]
```

```
print text1[0]..replace('+',' ')
```

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.

Note: If the string length is more than one, and a TypeError will be raised. The syntax can be ord("a") or ord('a'), both will give same results.

```
value= ord("A")
```

```
value1=ord('A')
```

```
#print value unicode value
```

```
Print(value,value1)
```

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

14. 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.

15. Write a python program to find the sum of first 'n' natural numbers without using any loop. Ask users to input the value of 'n'

```
n*(n+1)/2
```