

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

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

A) _init_

B) no_1

C) 1_no

D) _1

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

A) in

B) _init_

C) on

D) foo

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

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) ii – ii – i – iv

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

A) 7.1111...

B) 0

C) 0.3333...

D) 1

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

A) int

B) str

C) float

D) double

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.

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`

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`

Q11 to Q13 are subjective questions, answer them briefly

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

Answer: Lists - List is a collection which is ordered. Lists are mutable (changeable).

Allows duplicate members. Brackets used to represent: []. Lists are like arrays declared in other languages.

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Tuples - Collection of items which is ordered. Tuples are immutable (unchangeable). Brackets used to represent: (). Only difference between tuples and lists are that lists can be changed. Tuples are faster than lists as they are immutable.

Sets - Collection of Unordered and Unindexed items. Sets are mutable (changeable). Does not take duplicate values. Sets are unordered, so you cannot be sure in which order the items will appear. Brackets used to represent: {}. Sets are not faster than lists however they have a upper hand when it comes to membership testing.

Dictionaries - Key:Value Pair in Python, A dictionary is a collection which is unordered, changeable and indexed. In Python dictionaries are written with curly brackets, and they have keys and values. Brackets used to represent: {}.

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

Answer: In python, the **string** data types are immutable.

code to replace '+' with space from string "I+Love+Python":-

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

Output :- I Love Python

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.

Answer: The ord() method in Python converts a character into its Unicode code value. This method accepts a single character.

For example ord('A') returns 65 which is a unicode code point value of character 'A'.

The function for getting the datatype of a variable in python:-

```
x = 5.0
```

```
print(type(x))
```

Output :- <class 'float'>

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

Please refer the Jupyter Notebook for Solution.

