FLIP ROBO

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   C) 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) iii – 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 x^{16} 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.

    List: Ordered sequence of objects and it's mutable.

    Tuple: Ordered sequence of objects and it's immutable

    Set: The elements are unique there are no duplicated elements.

    Dictionary: Unordered sequence of items (key-value pairing)

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

    Strings are immutable

    s = "I+Love+Python"

    s= s.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.

    Return the Unicode point for one char. String

    ord('A') it will return 65

    type(7) it will return int which is the data type of number 7 as it's an integer number.

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'.