

Practice questions (from chapter 1 and 2 – Python Revision)

- Q1 Identify and separate valid and invalid identifiers (give the reason for invalid):
- | | |
|-------------|----------------|
| a. except | f. Date_1_4-20 |
| b. My_file | g. JK Num |
| c. 9_myfile | h. break |
| d. True | i. import |
| e. 9-Myfile | j. pass |
- Q2 Assuming given values of Text variable find and write the output of following python code:
- | | |
|--------------------------------|------------------------------|
| a. Text= "Hello! World" | d. Text= ""Hello!
World"" |
| b. Text= "\tHello! \t\t World" | e. Text= "'Hello!
World'" |
| c. Text= "\nHello! \t World" | f. Text= "Hello!\n World" |
- Q3 Write following mathematical expression into equivalent Python expression(Hint - math module):
- X^Y
 - $\sqrt{78}$
 - $\sin(45)$
 - factorial of 5
- Q4 Write the value of X after evaluating the expression (operator priority/precedence) :
- | | |
|-----------------------------------|----------------------|
| a) $X = 6 + 8 \% 76$ | e) $X = 80 / 10 / 2$ |
| b) $X = 4 * "Why?"$ | f) $X = 3 * 3$ |
| c) $X = 5 \% 3 // 9$ | g) $X = '3' * 3$ |
| d) $X = \text{int}(4.5 + 5 \% 2)$ | h) $X = '3' + '3'$ |

Q5

<p>Write following python programs ,record in word file with output and as per the following instructions:</p> <ol style="list-style-type: none"> Write comment in every program at the top of program. Use proper message for the user to understand the problem. For the output use a heading : Output of the program Use meaningful variables in program e.g. for a <u>number</u> - use <u>num</u> instead of <u>x</u>, <u>a</u> , <u>t</u> , <u>n</u> etc... 	
1	Program to Count number of alphabets, <u>small alphabets</u> , capital alphabets, digits and symbols in a string, if string is given by the user.
2	Program to find largest and second largest number in a List, List is given by user.
3	Write python code to find the sum of all elements of a <u>list</u> , List is given by user..
4	Write python code to compute the <u>nth Fibonacci</u> number, if n is given by user .
5	Write python code to find the factorial of first n natural number , if n is given by user.
6	Write python code to test if a string is a palindrome or <u>not</u> , if string is given by the user.

Q6 : Identify the data type of M in following python objects :

- | | |
|---------------------------------------|---------------------------------------|
| a. $M = [4, '99', 'hello', 56.678]$ | d. $M = \{83: 'Python', 283: 'C++'\}$ |
| b. $M = "Kips India"$ | e. $M = 56.33333$ |
| c. $M = ('Python', ['CS', 9, 6.002])$ | f. $M = \text{ord}('F')$ |