

## Python Assessment 2

24-10-2021(Max Marks: 100)

Read all the questions carefully. All are compulsory.

The objective of this assessment is testing your foundation

A) What would be the output of the following.

1. "Today" + " " + "is a great day"
2. "Today" " " "is a great day"
3. type(2.3)==float **(T/F)**
4. type(20)=int **(T/F)**
5. len([1,2,3,4,5,6,7,8]) will return \_\_\_\_?
6. str("Hello ") is a valid python statement **(T/F)**
7. Justify your answer with examples (10)
8. "somani".\_\_getitem\_\_(-1) == "somani"[-1] returns \_\_\_\_?
9. ord('b') returns \_\_\_\_?
10. To see the identity of an object which function is used?

B) Demonstrate the difference between a string and a raw-string

C) result = int("101") is a valid statement. Explain with clear demonstration

D) int("1010",base=2) will return \_\_\_\_?

E) bin(7) will return \_\_\_\_?

F) Write a function that takes an Integer, and returns the **bit length** of that integer.

G) Write a function to accept a list **only** and return a list with all elements squared.

H) Explain the difference between **mutability** and **immutability** with clear demonstration.

I) Can we update a tuple? **Demonstrate**

J) Using **lambda**, wap that accepts a sentence and returns the list of all words in the sentence

K) Guess the output of the following.

```
num = -3
while num:
    print('num = {}'.format(num))
    num = num + 1
    print('Final value of num on exit = {}'.format(num))
```

L) 'rahul' != 'rahul' is \_\_\_\_?

M) Can we compare two tuples using the comparison operator <. If the answer is **yes** then which **magic method** is responsible for making it possible to compare tuples?

N) Give an example of a while loop that will **never end**.

O) Give an example of a while loop that will **never execute**.

P) Write function to accept to accept any number of **positional** and **keyword arguments**.

Q) Which magic method is called to create an **object**?

- Explain self
  - Explain class and static method with examples
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R) Write a class that has methods to connect to SQLite. Write methods to perform insert,read,update and delete operation on the table. The Table should have the following fields. No two rows (records) can have the same ID.

**ID,name,age,profession.**

R) Write a function that can

- Create a file
- Write contents to the file
- Read Content from the file
- Search for something in the file **using regular expression**