

1. Write a Python Script showing usage of all data types.

Ans:-

2. Which of these is not a core datatype?

a) Lists

b) Dictionary

c) Tuples

d) Class

Ans:- (D) Class

3. Following set of commands are executed in shell, what will be the output?

```
str="hello"
```

```
print str[:2]
```

a) he

b) lo

c) olleh

d) hello

Ans:- (A) he

4. What error occurs when you execute?

a) SyntaxError

b) NameError

c) ValueError

d) TypeError

Ans :- (A) Syntax Error

5. What datatype is the object below ?

```
L = [1, 23, 'hello', 1]
```

a) List

b) dictionary

c) array

d) tuple

Ans :- (A) List

6. In order to store values in terms of key and value we use what core datatype.

a) List

b) tuple

c) class

d) dictionary

Ans:- (D) dictionary

7. What is answer of this expression, $22 \% 3$ is?

a) 7

b) 1

c) 0

d) 5

Ans:- (B) 1

8. You can perform mathematical operation on String?

a) True

b) False

Ans :- (b) False

9 What is the output of this expression, $3*1**3$?

a) 27

b) 9

c) 3

d) 1

Ans:- (c) 3

10 Differentiate between list and tuple with example.

Ans :- List is the datatype which can be mutable. Where as tuple is the datatype which can not be mutable.

List :-

```
My_list = [1,2,3]
```

tuple:-

```
my_tuple = (1,2,3)
```

11. How to access last element of list ?

Ans:- [-1]

12. What Does The Index Out Of Range Error Mean?

Ans:- index out of range means that you are providing an index for which a list element does not exist.

13 How To Convert A List To A String?

Ans:- str() method. Then we can .join()them

```
mylist = ['1', '2', '3']
```

```
mystring = ''.join(mylist)
```

14 How To Sort a List in Python?

Ans:- by using function Called sort()

```
List = [123, 'xyz', 'zara', 'abc', 'xyz'];
```

```
List.sort();  
  
print "List : ", aList
```

15. Write a program to create dictionary , store values in it then access all the values stored in dictionary and store those values into list.

```
mydict = {'a': 'hello', 'b': 'world'}  
all_value = mydict.values()  
print all_value  
  
list = []  
list.append(all_value)  
print list
```

16. Write a program to create simple calculator.

```
while True:  
    print("1. Addition")  
    print("2. Subtraction")  
    print("3. Multiplication")  
    print("4. Division")  
    print("5. Exit")  
    choice = int(input("Enter your choice: "))  
    if (choice>=1 and choice<=4):  
        print("Enter two numbers: ")  
        num1 = int(input())  
        num2 = int(input())  
        if choice == 1:  
            res = num1 + num2  
            print("Result = ", res)  
        elif choice == 2:  
            res = num1 - num2  
            print("Result = ", res)  
        elif choice == 3:  
            res = num1 * num2  
            print("Result = ", res)  
        else:  
            res = num1 / num2  
            print("Result = ", res)  
    elif choice == 5:  
        break  
    else:  
        print("Wrong input...!!")
```

17 a =10

b = 20

Is there any difference between (a is b) and (a ==b) ?

Ans :- An is expression evaluates to True if two variables point to the same (identical) object.

Where as An == expression evaluates to True if the objects referred to by the variables are equal (have the same contents).