

ASSIGNMENT1

PYTHON TRAINING



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CONSULTADD

Submitted by

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

x = 15;  
y = 98;  
z = 87.9;  
  
name= **'arief'**;  
  
alist = [10,365,68,524,364,**'raja'**];  
  
atuple= (25,365,21,85,**'ghdf'**);  
  
adict={**'name'**:**'arief'**, **'age'**:**'23'**};  
  
print(**"sum="**,x+y)  
print(name)  
print(alist)  
print(atuple)  
print(adict)

2. Which of these in not a core datatype?

a) Lists

b) Dictionary

c) Tuples

d) Class – Answer

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

str="hello"

print str[:2]

a) he—Answer

b) lo

c) olleh

d) hello

4. What error occurs when you execute?

a) SyntaxError -- Answer

b) NameError

c) ValueError

d) TypeError

5. What dataype is the object below ?

L = [1, 23, ‘hello’, 1]

a) List--Answer

b) dictionary

c) array

d) tuple

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—Answer

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

a) 7

b) 1--Answer

c) 0

d) 5

8. You can perform mathematical operation on String?

a) True

b) False—Answer

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

a) 27

b) 9

c) 3--Answer

d) 1

10 Differentiate between list and tuple with example

List is mutable and tuple is immutable. Which means tuples can’t be edited like lists as it has a fixed size.

11. How to access last element of list ?

Answer: To access the last element in a list we use listname[-1]

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

Answer: Index out of bound :

**When we try to access the index which does not exist in a list we get index out of bound exception. i.e., when a has 3 values like lista = [1,2,3] and we try to access a 4th index value i.e lista[3] which does not exist we get an Index out of bound error**

13 How To Convert A List To A String?

Answer: we use ‘’.join(list) to convert a list to string

Example:

list1 = [**'1'**, **'2'**, **'3'**]  
str1 = **''**.join(list1)  
  
print(str1)

14. How To Sort a List in Python?

Answer: We use sort() to sort a list. Example: List.sort();

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.

1. Program for dictionary and list

Employees ={**'name'**:**'arief'**, **'age'**:23, **'phone'**:9895133089}  
print(Employees[**'name'**])*# Accessed from dictionery*name=Employees[**'name'**]  
age=Employees[**'age'**]  
phone=Employees[**'phone'**]  
  
Employees = [name,age,phone]*#Assigned dictionary elements to a list*print(Employees[1])*# Accessing elements from list*

16. Write a program to create simple calculator.

**import** math  
**def** add(x, y):  
  
 **return** x + y  
  
**def** subtract(x, y):  
  
 **return** x - y  
  
**def** multiply(x, y):  
  
 **return** x \* y  
  
**def** divide(x, y):  
  
 **return** x / y  
**def** squart(x):  
 **return** (math.sqrt(x))  
  
print(**"Select any operation."**)  
print(**"1.Add"**)  
print(**"2.Subtract"**)  
print(**"3.Multiply"**)  
print(**"4.Divide"**)  
print(**"5.square root"**)  
  
choice = input(**"Enter choice(1/2/3/4/5):"**)  
  
**if** choice == **'5'**:  
 num1 = int(input(**"Enter first number: "**))  
**else**:  
  
 num2 = int(input(**"Enter second number: "**))  
  
**if** choice == **'1'**:  
 print(num1,**"+"**,num2,**"="**, add(num1,num2))  
  
**elif** choice == **'2'**:  
 print(num1,**"-"**,num2,**"="**, subtract(num1,num2))  
  
**elif** choice == **'3'**:  
 print(num1,**"\*"**,num2,**"="**, multiply(num1,num2))  
  
**elif** choice == **'4'**:  
 print(num1,**"/"**,num2,**"="**, divide(num1,num2))  
  
**elif** choice == **'5'**:  
 print(squart(num1))  
  
  
**else**:  
 print(**"Invalid input"**)

17 a =10

b = 20

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

Answer: Yes