In [13]: #Eval Functions always takes a string it will first evaluate it and after evaluation #convert that string into an object x=eval("10+20") print(x) print(type(x)) (10+20j) <class 'complex'> In []: [10,20,30,40,50] {10:20,30:40,50:60} {10, 20, 30, 40} (10, 20, 30, 40)[10, 20, [20, 30, 40, 50], 10] In [14]: x = eval(input("Enter Your data")) print(type(x)) print(x) #"[10, 20, 30, 40, 50, 60]" Enter Your data[10,20,30,40,50] <class 'list'> [10, 20, 30, 40, 50] In [17]: x = eval(input("Enter Your data")) print(type(x)) print(x) Enter Your data{10:20,30:40,50:60} <class 'dict'> {10: 20, 30: 40, 50: 60} In [18]: x = eval(input("Enter Your data")) print(type(x)) print(x) Enter Your data{10, 20, 30, 40, 50, 60} <class 'set'> {50, 20, 40, 10, 60, 30} In [20]: x = eval(input("Enter Your data")) print(type(x)) print(x) Enter Your data(10,20,30,40) <class 'tuple'> (10, 20, 30, 40) In [24]: #Aliasing and Cloning of List #Aliasing means gives a shorter name x=[10, 20, 30, 40, 50]y=x y[2]=200 print(id(x)) print(id(y)) print(x) print(y) #The major disadvantage of aliasing is if we are going to change any data through first reference #then due to that change the second reference will also gets effected 2804790378432 2804790378432 [10, 20, 200, 40, 50] [10, 20, 200, 40, 50] In [ ]: #Cloning --> Copying the list object 1.First way is slicing In [26]: x=[10,20,30,40,50,60]y=x[:] y[1]=200 x[2]=5000 print(id(x)) print(id(y)) print(x) print(y) 2804790340608 2804761440512 [10, 20, 5000, 40, 50, 60] [10, 200, 30, 40, 50, 60] 2.second way is copy function In [28]: x=[10,20,30,40,50,60]y=x.copy() y[1]=200 x[2]=5000 print(id(x)) print(id(y)) print(x) print(y) 2804790383488 2804790387584 [10, 20, 5000, 40, 50, 60] [10, 200, 30, 40, 50, 60] In [ ]: #Pass Statement -->, pass is a keyword in python in our programming i want to only declare any function , loop or condition. it is used to create a empty block In [30]: **def** add(): pass In [35]: **def** comp(): pass Input In [35] IndentationError: expected an indented block In [34]: **if True**: pass In [32]: for i in range(1,2): pass Input In [32] IndentationError: expected an indented block In [37]: #Dictionary Comphersion --> for creation of dictionary into a concise manner #Comphersion of dictionary is also possible square =  $\{x:x*x \text{ for } x \text{ in } range(1,6)\}$ square Out[37]: {1: 1, 2: 4, 3: 9, 4: 16, 5: 25} In [40]: square =  $\{x:2*x \text{ for } x \text{ in range}(1,6)\}$ type(square) dict Out[40]: In [39]: #Tuple Comphersion --> tuple comphersion is not possible because it will give you a generatir object  $t=(x^{**}2 \text{ for } x \text{ in } range(1,6))$ print(t) <generator object <genexpr> at 0x0000028D0A8DF270> In [41]: #Set Comphersion  $t={x**2 for x in range(1,6)}$ print(t) {1, 4, 9, 16, 25} In [ ]: Q - What can be the code to loop over the keys of a dictionary? My\_dictionary = {0: 'a', 1: 'b', 2: 'c'} A - for i in My\_Dictionary: print(keys) B - for i in My\_Dictionary: print(My\_Dictionary) C - Not possible. D - for i in My\_Dictionary: print(i) Q - What is the output of print str \* 2 if str = 'Hello World!'? A - Hello World!Hello World! B - Hello World! \* 2 C - Hello World! D - None of the above. In [43]: #\* --> repition operator , + --> concatenation str="Hello World" str\*2 'Hello WorldHello World' Out[43]: In [ ]: Q - There are different basic operators in python and work according to the order of their precedence. Arrange the order of precedence of the following operator i)- Division ii)- Multiplication iii) - Parentheses iv) - Exponential v) - Addition vi) - Subtraction A - i, ii, iii, iv, v, vi. B - iv, iii, ii, i, vi, v. C - iii, iv, i, ii, v, vi. D - iv, iii, i, ii, v, vi. In [ ]: Q - What is the output for -'you are doing well' [2:999] A - 'you are doing well' B - ' ' C - Index error. D - 'u are doing well' In [ ]: insert()--> first argument will always be the index and second is the data In [ ]: Q - What is output of following code -1 = [1, 2, 6, 5, 7, 8]1.insert(9) A - 1=[9,1,2,6,5,7,8]B - l=[1,2,6,5,9.7,8] (insert randomly at any position) C - 1 = [1, 2, 6, 5, 7, 8, 9]D - Type Error In [ ]: Q - Which of the following function checks in a string that all characters are alphanumeric? A - shuffle(lst) B - capitalize() C - isalnum() D - isdigit() In [ ]: Q - What is the output for -'Tutorials Point' [100:200]? A - Index error. B - ' ' C - 'Tutorials Point' D - Syntax error In [ ]: Q - What is the output of the following code? print(0.1+0.2==0.3) A - True B - False C - No D - Yes Q - Which of the following operator in python performs the division on operands where the result is the quotient in which the digits after the decimal point are removed? A - / B - // C - % D - None Which of the following statement is used when a statement is required syntactically but you do not want any command or code to execute? A - break B - continue C - pass D - None of the above. In [ ]: Q - What is the output of print tinylist \* 2 if tinylist = [123, 'john']? A - [123, 'john', 123, 'john'] B - [123, 'john'] \* 2 C - Error D - None of the above. In [ ]: Q - What is the output of print tinytuple \* 2 if tinytuple = (123, 'john')? A - (123, 'john', 123, 'john') B - (123, 'john') \* 2 C - Error D - None of the above. In [ ]: Q - Which of the following operator in python performs exponential (power) calculation on operands? A - \*\* B - // C - is D - not in In []: Q - How can we swap two numbers a = 10, b = 20 in python without using third variable? A - a = bb = aB - a, b = b, aC - both a & b D - b = aa = bWhich of the following functions convert string into any object? a.eval() b.input() c.Id() d.enumerate()