

Unit -1 : Computational Thinking and Programming-2

Topic: Revision of python topics covered in class XI

KEY POINTS:

Introduction to Python

- **Python** is an open source, object oriented HLL developed by Guido van Rossum in 1991
- **Tokens**- smallest individual unit of a python program.
- **Keyword**-Reserved word that can't be used as an identifier
- **Identifiers**-Names given to any variable, constant, function or module etc.
-

Classify the following into valid and invalid identifier

(i) Mybook (ii) Break (iii) _DK (iv) My_book (v) PaidIntrest (vi) s-num
(vii)percent (viii) 123 (ix) dit km (x) class

Ans:(i)valid(ii)Invalid (iii)Valid (iv)valid (v)valid (vi)invalid ('-' is not allowed
(vii)valid(viii)invalid(First Character must be alphabet(ix)invalid (no space is allowed)
(x)invalid (class is a keyword)

- **Literals**- A fixed numeric or non-numeric value.
- **Variable**- A variable is like a container that stores values to be used in program.
- **String**- The text enclosed in quotes.
- **Comment**- Comments are non-executable statement begin with # sign.
- **Docstring**-Comments enclosed in triple quotes (single or double).
- **Operator** – performs some action on data
 - Arithmetic(+, -, *, /, %, **, //)
 - Relational/comparison (<, >, <=, >=, =, !=).
 - Assignment(=, /=, +=, -=, *=, %=, **=, //=)
 - Logical – and, or
 - Membership – in, not in

- **Precedence of operators:**

() Parentheses	Highest ↓ Low
** Exponentiation	
~ x Bitwise nor	
+x, -x Positive, Negative (Unary +, -)	
*(multiply), / (divide), //(floor division), %(modulus)	
+(add), -(subtract)	
& Bitwise and	
^ Bitwise XOR	
Bitwise OR	
<(less than), <=(less than or equal), >(greater than), >=(greater than or equal to), ==(equal), !=(not equal)	
is, is not	
not x Boolean NOT	
and Boolean AND	
or Boolean OR	

Data type:

There are following basic types of variable in as explained in last chapter:

Type	Description
bool	Stores either value True or False.
int	Stores whole number.
float	Stores numbers with fractional part.
Complex	Stores a number having real and imaginary part (a+bj)
String	Stores text enclosed in single or double quote
List	Stores list of comma separated values of any data type between square [] brackets.(mutable)
Tuple	Stores list of comma separated values of any data type between parentheses () (immutable)
Dictionary	Unordered set of comma-separated key:value pairs , within braces { }

All questions are of 1 mark.

Q.No.

Question

1. Which of the following is a valid identifier:
i. 9type ii. _type iii. Same-type iv. True
2. Which of the following is a relational operator:
i. > ii. // iii. or iv. **
3. Which of the following is a logical operator:
i. + ii. /= iii. and iv. in
4. Identify the membership operator from the following:
i. in ii. not in iii. both i & ii iv. Only i
5. Which one is a arithmetic operator:
i. not ii. ** iii. both i & ii iv. Only ii
6. What will be the correct output of the statement : >>>4//3.0
i. 1 ii. 1.0 iii. 1.3333 iv. None of the above
7. What will be the correct output of the statement : >>> 4+2**2*10
i. 18 ii. 80 iii. 44 iv. None of the above
8. Give the output of the following code:
>>> a,b=4,2
>>> a+b**2*10
i. 44 ii. 48 iii. 40 iv. 88
9. Give the output of the following code:
>>> a,b = 4,2.5
>>> a-b//2**2
i. 4.0 ii. 4 iii. 0 iv. None of the above
10. Give the output of the following code:
>>>a,b,c=1,2,3
>>> a//b**c+a-c*a
i. -2 ii. -2.0 iii. 2.0 iv. None of the above
11. If a=1,b=2 and c= 3 then which statement will give the output as : 2.0 from the following:
i. >>>a%b%c+1 ii. >>>a%b%c+1.0 iii. >>>a%b%c iv. a%b%c-1
12. Which statement will give the output as : True from the following :
i. >>>not -5 ii. >>>not 5 iii. >>>not 0 iv. >>>not(5-1)
13. Give the output of the following code:
>>>7*(8/(5//2))
i. 28 ii. 28.0 iii. 20 iv. 60
14. Give the output of the following code:
>>>import math
>>> math.ceil(1.03)+math.floor(1.03)
i. 3 ii. -3.0 iii. 3.0 iv. None of the above
15. What will be the output of the following code:
>>>import math
>>>math.fabs(-5.03)
i. 5.0 ii. 5.03 iii. -5.03 iv . None of the above
- Single line comments in python begin with..... symbol.
16. i. # ii. “ iii. % iv. _
17. Which of the following are the fundamental building block of a python program.
i. Identifier ii. Constant iii. Punctuators iv. Tokens
18. The input() function always returns a value oftype.
i. Integer ii. float iii. string iv. Complex
19. function is used to determine the data type of a variable.
i. type() ii. id() iii. print() iv. str()
20. The smallest individual unit in a program is known as a.....
i. Token ii. keyword iii. punctuator iv. identifier

FLOW OF EXECUTION

#Decision making statements in python

Statement	Description
if statement	An if statement consists of a boolean expression followed by one or more statements.
if...else statement	An if statement can be followed by an optional else statement, which executes when the boolean expression is false.
if...elif...else	If the first boolean expression is false, the next is checked and so on. If one of the condition is true , the corresponding statement(s) executes, and the statement ends.
nested if...else statements	It allows to check for multiple test expression and execute different codes for more than two conditions.

#Iteration or Looping construct statements in python

Loop	Description
for loop: for<ctrl_var>in<sequence>: <statement in loop body> else: <statement>	It is used to iterate/repeat itself over a range of values or sequence one by one.
while loop: while<test_exp>: body of while else: body of else	The while loop repeatedly executes the set of statement till the defined condition is true.

21. Which of the following is not a decision making statement
i. if..else statement ii. for statement iii. if-elif statement iv. if statement
22.loop is the best choice when the number of iterations are known.
i. while ii. do-while iii. for iv. None of these
23. How many times will the following code be executed.

```
a=5
while a>0:
    print(a)
print("Bye")
```

- i. 5 times ii. Once iii. Infinite iv. None of these
24. What abandons the current iteration of the loop
i. continue ii. stop iii. infinite iv. Break
25. Find the output of the following python program
- ```
for i in range(1,15,4):
 print(i, end=',')
```
- i. 1,20,3 ii. 2,3,4 iii. 1,5,10,14 iv. 1,5,9,13
26. ....loop is the best when the number of iterations are not known.  
i. while ii. do-while iii. for iv. None of these
27. In the nested loop ....loop must be terminated before the outer loop.  
i. Outer ii. enclosing iii. inner iv. None of these
28. ....statement is an empty statement in python.  
i. pass ii. break iii. continue iv. if
29. How many times will the following code be executed

```
for i in range(1,15,5):
 print(i,end=',')
```

- i. 3 ii. 4 iii. 1 iv. infinite
30. Symbol used to end the if statement:  
i. Semicolon(;) ii. Hyphen(-) iii. Underscore(\_) iv. colon(:)

**String: Text enclosed inside the single or double quotes referred as String.**

**String Operations: String can be manipulated using operators like concatenation (+), repetition (\*) and membership operator like in and not in.**

| Operation     | Description   |
|---------------|---------------|
| Concatenation | Str1 + Str2   |
| Repetition    | Str * x       |
| Membership    | in , not in   |
| Comparison    | str1 > str2   |
| Slicing       | String[range] |

## String Methods and Built-in functions:

| Function     | Description                                                                                             |
|--------------|---------------------------------------------------------------------------------------------------------|
| len()        | Returns the length of the string.                                                                       |
| capitalize() | Converts the first letter of the string in uppercase                                                    |
| split()      | Breaks up a string at the specified separator and returns a list of substrings.                         |
| replace()    | It replaces all the occurrences of the old string with the new string.                                  |
| find()       | It is used to search the first occurrence of the substring in the given string.                         |
| index()      | It also searches the first occurrence and returns the lowest index of the substring.                    |
| isalpha()    | It checks for alphabets in an inputted string and returns True in string contains only letters.         |
| isalnum()    | It returns True if all the characters are alphanumeric.                                                 |
| isdigit()    | It returns True if the string contains only digits.                                                     |
| title()      | It returns the string with first letter of every word in the string in uppercase and rest in lowercase. |
| count()      | It returns number of times substring str occurs in the given string.                                    |
| lower()      | It converts the string into lowercase                                                                   |
| islower()    | It returns True if all the letters in the string are in lowercase.                                      |
| upper()      | It converts the string into uppercase                                                                   |
| isupper()    | It returns True if all the letters in the string are in uppercase.                                      |
| lstrip()     | It returns the string after removing the space from the left of the string                              |
| rstrip()     | It returns the string after removing the space from the right of the string                             |
| strip()      | It returns the string after removing the space from the both side of the string                         |
| isspace()    | It returns True if the string contains only whitespace characters, otherwise returns False.             |
| istitle()    | It returns True if the string is properly title-cased.                                                  |
| swapcase()   | It converts uppercase letter to lowercase and vice versa of the given string.                           |
| ord()        | It returns the ASCII/Unicode of the character.                                                          |
| chr()        | It returns the character represented by the imputed Unicode /ASCII number                               |

31. Which of the following is not a python legal string operation.  
i. 'abc'+'aba' ii. 'abc'\*3 iii. 'abc'+3 iv. 'abc'.lower()
32. Which of the following is not a valid string operation.  
i. Slicing ii. concatenation iii. Repetition iv. floor
33. Which of the following is a mutable type.  
i. string ii. tuple iii. int iv. list
34. What will be the output of the following code  
str1="I love Python"  
strlen=len(str1)+5  
print(strlen)  
i. 18 ii. 19 iii. 13 iv. 15
35. Which method removes all the leading whitespaces from the left of the string.  
i. split() ii. remove() iii. lstrip() iv. rstrip()
36. It returns True if the string contains only whitespace characters, otherwise returns False. i) isspace() ii. strip() iii. islower() iv. isupper()
37. It converts uppercase letter to lowercase and vice versa of the given string.  
i. lstrip() ii. swapcase() iii. istitle() iv. count()
38. What will be the output of the following code.  
Str='Hello World! Hello Hello'  
Str.count('Hello',12,25)  
i. 2 ii. 3 iii. 4 iv. 5
39. What will be the output of the following code.  
Str="123456"  
print(Str.isdigit())  
i. True ii. False iii. None iv. Error
40. What will be the output of the following code.  
Str="python 38"  
print(Str.isalnum())  
i. True ii. False iii. None iv. Error
41. What will be the output of the following code.  
Str="pyThOn"  
print(Str.swapcase())  
i. PYtHoN ii. pyThon iii. python iv. PYTHON
42. What will be the output of the following code.  
Str="Computers"  
print(Str.rstrip("rs"))  
i. Computer ii. Computers iii. Compute iv. compute
43. What will be the output of the following code.  
Str="This is Meera\ pen"  
print(Str.isdigit())  
i. 21 ii. 20 iii. 18 iv. 19
44. How many times is the word 'Python' printed in the following statement.  
s = "I love Python"  
for ch in s[3:8]:  
print('Python')  
i. 11 times ii. 8 times iii. 3 times iv. 5 times

45. Which of the following is the correct syntax of string slicing:  
 i. str\_name[start:end]    iii. str\_name[start:step]  
 ii. str\_name[step:end]    iv. str\_name[step:start]
46. What will be the output of the following code?  

```
A="Virtual Reality"
print(A.replace('Virtual','Augmented'))
```

 i. Virtual Augmented    iii. Reality Augmented  
 ii. Augmented Virtual    iv. Augmented Reality
47. What will be the output of the following code?  

```
print("ComputerScience".split("er",2))
```

 i. ["Computer","Science"]    iii. ["Comput","Science"]  
 ii. ["Comput","erScience"]    iv. ["Comput","er","Science"]
48. Following set of commands are executed in shell, what will be the output?  

```
>>>str="hello"
>>>str[:2]
```

 i. he    ii. lo    iii. olleh    iv. hello
49. ....function will always return tuple of 3 elements.  
 i. index()    ii. split()    iii. partition()    iv. strip()
50. What is the correct python code to display the last four characters of "Digital India"  
 i. str[-4:]    ii. str[4:]    iii. str[\*str]    iv. str[/4:]

**LIST: A list is a collection of comma-separated values (items) of same or different type within square brackets. List types can be of three types:**

1. Empty list    2. Long List    3. Nested List
- 2.

### **Built-in Function (Manipulating Lists)**

| Function  | Description                                                                                      |
|-----------|--------------------------------------------------------------------------------------------------|
| append()  | It adds a single item to the end of the list.                                                    |
| extend()  | It adds one list at the end of another list                                                      |
| insert()  | It adds an element at a specified index.                                                         |
| reverse() | It reverses the order of the elements in a list.                                                 |
| index()   | It returns the index of first matched item from the list.                                        |
| len()     | Returns the length of the list i.e. number of elements in a list                                 |
| sort()    | This function sorts the items of the list.                                                       |
| clear()   | It removes all the elements from the list.                                                       |
| count()   | It counts how many times an element has occurred in a list and returns it.                       |
| pop()     | It removes the element from the end of the list or from the specified index and also returns it. |



|               |                                                                                  |
|---------------|----------------------------------------------------------------------------------|
| del Statement | It removes the specified element from the list                                   |
| remove()      | It is used when we know the element to be deleted, not the index of the element. |
| max()         | Returns the element with the maximum value from the list.                        |
| min()         | Returns the element with the minimum value from the list.                        |

51. Given the list L=[11,22,33,44,55], write the output of print(L[: :-1]).  
i. [1,2,3,4,5] ii. [22,33,44,55] iii. [55,44,33,22,11] iv. Error in code
52. Which of the following can add an element at any index in the list?  
i. insert() ii. append() iii. extend() iv. all of these
53. Which of the following function will return a list containing all the words of the given string?  
i. split() ii. index() iii. count() iv. list()
54. Which of the following statements are True.  
a. [1,2,3,4]>[4,5,6]  
b. [1,2,3,4]<[1,5,2,3]  
c. [1,2,3,4]>[1,2,0,3]  
d. [1,2,3,4]<[1,2,3,2]  
i. a,b,d ii. a,c,d iii. a,b,c iv. Only d
55. If l1=[20,30] l2=[20,30] l3=['20','30'] l4=[20.0,30.0] then which of the following statements will not return 'False':  
a. >>>l1==l2 b. >>>l4>l1 c. >>>l1>l2 d. >>> l2==l2  
i. b, c ii. a,b,c iii. a,c,d iv. a,d
56. >>>l1=[10,20,30,40,50]  
>>>l2=l1[1:4]  
What will be the elements of list l2:  
i. [10,30,50] ii. [20,30,40,50] iii. [10,20,30] iv. [20,30,40]
57. >>>l=['red','blue']  
>>>l = l + 'yellow'  
What will be the elements of list l:  
i. ['red','blue','yellow'] ii. ['red','yellow'] iii. ['red','blue','yellow'] iv. Error
58. What will be the output of the following code:  
>>>l=[1,2,3,4]  
>>>m=[5,6,7,8]  
>>>n=m+l  
>>>print(n)  
i. [1,2,3,5,6,7,8] ii. [1,2,3,4,5,6,7,8] iii. [1,2,3,4][5,6,7,8] iv. Error
59. What will be the output of the following code:  
>>>l=[1,2,3,4]  
>>>m=l\*2  
>>>n=m\*2  
>>>print(n)  
i [1,2,3,4,1,2,3,4,1,2,3,4] ii. [1,2,3,4,1,2,3,4,1,2,3,4,1,2,3,4] iii. [1,2,3,4][4,5,6,7]  
iv. [1,2,3,4]
60. Match the columns: if  
  
>>>l=list('computer')

Column A

Column B

1. L[1:4]            a. ['t','e','r']
2. L[3:]            b. ['o','m','p']
3. L[-3:]           c. ['c','o','m','p','u','t']
4. L[:-2]           d. ['p','u','t','e','r']
- i. 1-b,2-d,3-a,4-c    iii. 1-c,2-b,3-a,4-d
- ii. 1-b,2-d,3-c,4-a   iv. 1-d,2-a,3-c,4-b

61. If a list is created as  
`>>>l=[1,2,3,'a',['apple'],'green'],5,6,7,['red'],'orange']` then what will be the output of the following statements:  
`>>>l[4][1]`  
 i. 'apple'    iii. 'green'  
 ii. 'red'    iv. 'orange'
62. `>>>l[8][0][2]`  
 i. 'd'    iii. 'e'  
 ii. 'r'    iv. 'o'
63. `>>>l[-1]`  
 i. ['apple'],'green']    iii. ['red'],'orange']  
 ii. ['red']    iv. ['orange']
64. `>>>len(l)`  
 i. 10    iii. 9  
 ii. 8    iv. 11
65. What will be the output of the following code:  
`>>>l1=[1,2,3]`  
`>>>l1.append([5,6])`  
`>>>l1`  
 i. [1,2,3,5,6]    ii. [1,2,3,[5,6]]    iii. [[5,6]]    iv. [1,2,3,[5,6]]
66. What will be the output of the following code:  
`>>>l1=[1,2,3]`  
`>>>l2=[5,6]`  
`>>>l1.extend(l2)`  
`>>>l1`  
 ii. [5,6,1,2,3]    ii. [1,2,3,5,6]    iii. [1,3,5]    iv. [1,2,3,6]
67. What will be the output of the following code:  
`>>>l1=[1,2,3]`  
`>>>l1.insert(2,25)`  
`>>>l1`  
 iii. [1,2,3,25]    ii. [1,25,2,3]    iii. [1,2,25,3]    iv. [25,1,2,3,6]
68. `>>>l1=[10,20,30,40,50,60,10,20,10]`  
`>>>l1.count('10')`  
 i. 3    ii. 0    iii. 2    iv. 9
69. Which operators can be used with list?  
 i. in    ii. not in    iii. both (i)&(ii)    iv. Arithmetic operator only
70. Which of the following function will return the first occurrence of the specified element in a list.  
 i. sort()    ii. value()    iii. index()    iv. sorted()

**Tuples and Dictionary:** Tuple is a data structure in python, A tuple consists of multiple values in a single variable separated by commas. Tuples are enclosed within parentheses ( ). Tuple is an immutable data type.

Common Tuple Operations:

| Operation     | Description      |
|---------------|------------------|
| Concatenation | Tuple1 + Tuple2  |
| Repetition    | Tuple * x        |
| Index         | Tuple.index(ele) |
| Count         | Tuple.count(ele) |
| Slicing       | Tuple[range]     |
| Membership    | in and not in    |

### **Tuple Functions:**

| Function      | Description                                                                  |
|---------------|------------------------------------------------------------------------------|
| del statement | It is used to delete the tuple.                                              |
| index( )      | It returns the index of first matched item from the tuple.                   |
| len( )        | Returns the length of the tuple i.e. number of elements in a tuple           |
| count( )      | It counts how many times an element has occurred in a tuple and returns it.  |
| any ( )       | It returns True if a tuple is having at least one item otherwise False.      |
| sorted( )     | It is used to sort the elements of a tuple. It returns a list after sorting. |
| sum( )        | It returns sum of the elements of the tuple.                                 |
| max( )        | Returns the element with the maximum value from the tuple.                   |
| min( )        | Returns the element with the minimum value from the tuple.                   |

**Dictionary:** Python Dictionaries are a collection of some key-value pairs .Dictionaries are **mutable** unordered collections with elements in the form of a key:value pairs that associate keys to values. Dictionaries are enclosed within braces { }

| Function | Description                                                                      |
|----------|----------------------------------------------------------------------------------|
| items( ) | It returns the content of dictionary as a list of tuples having key-value pairs. |
| keys( )  | It returns a list of the key values in a dictionary                              |

|             |                                                                                      |
|-------------|--------------------------------------------------------------------------------------|
| values( )   | It returns a list of values from key-value pairs in a dictionary                     |
| get( )      | It returns the value for the given key ,if key is not available then it returns None |
| copy( )     | It creates the copy of the dictionary.                                               |
| len( )      | Returns the length of the Dictionary i.e. number of key:value pairs in a Dictionary  |
| fromkeys( ) | It is used to create dictionary from a collection of keys(tuple/list)                |
| clear( )    | It removes all the elements from the Dictionary.                                     |
| sorted( )   | It sorts the elements of a dictionary by its key or values.                          |
| popitem( )  | It removes the last item from dictionary and also returns the deleted item.          |
| max( )      | Returns the key having maximum value in the Dictionary.                              |
| min( )      | Returns the key having minimum value in the Dictionary.                              |

71. Which of the statement(s) is/are correct.
- Python dictionary is an ordered collection of items.
  - Python dictionary is a mapping of unique keys to values
  - Dictionary is mutable.
  - All of these.
72. ....function is used to convert a sequence data type into tuple.
- List()
  - tuple()
  - TUPLE
  - tup()
73. It tup=(20,30,40,50), which of the following is incorrect
- print(tup[3])
  - tup[2]=55
  - print(max(tup))
  - print(len(tup))
74. Consider two tuples given below:
- ```
>>>tup1=(1,2,4,3)
>>>tup2=(1,2,3,4)
```
- What will the following statement print(tup1<tup2)
- True
 - False
 - Error
 - None of these
75. Which function returns the number of elements in the tuple
- len()
 - max()
 - min()
 - count()

76. Which function is used to return a value for the given key.
i. len() ii. get() iii. keys() iv. None of these
77. Keys of the dictionary must be
i. similar ii. unique iii. can be similar or unique iv. All of these
78. Which of the following is correct to insert a single element in a tuple .
i. T=4 ii. T=(4) iii. T(4,) iv. T=[4,]
79. Which of the following will delete key-value pair for key='red' form a dictionary D1
i. Delete D1("red") ii. del. D1("red") iii. del D1["red"] iv. del D1
80. Which function is used to remove all items form a particular dictionary.
i. clear() ii. pop() iii. delete iv. rem()
81. In dictionary the elements are accessed through
i. key ii. value iii. index iv. None of these
82. Which function will return key-value pairs of the dictionary
i. key() ii. values() iii. items() iv. get()
83. Elements in a tuple can be oftype.
i. Dissimilar ii. Similar iii. both i & ii iv. None of these
84. To create a dictionary , key-value pairs are separated by.....
i. (;) ii. (,) iii. (:) iv. (/)
85. Which of the following statements are not correct:
a. An element in a dictionary is a combination of key-value pair
b. A tuple is a mutable data type
c. We can repeat a key in dictionary
d. clear() function is used to deleted the dictionary.
i. a,b,c ii. b,c,d iii. b,c,a iv. a,b,c,d
86. Which of the following statements are correct:
a. Lists can be used as keys in a dictionary
b. A tuple cannot store list as an element
c. We can use extend() function with tuple.
d. We cannot delete a dictionary once created.
i. a,b,c ii. b,c,d iii. b,c,a iv. None of these
87. Like lists, dictionaries are.....which mean they can be changed.
i. Mutable ii. immutable iii. variable iv. None of these
88. To create an empty dictionary , we use
i. d=[] ii. d =() iii. d = { } iv. d= < >
89. To create dictionary with no items , we use
ii. Dict ii. dict() iii. d = [] iv. None of these
90. What will be the output
>>>d1={'rohit':56,"Raina":99}
>>>print("Raina" in d1)
i. True ii. False iii. No output iv. Error
91. Rahul has created the a tuple containing some numbers as
>>>t=(10,20,30,40)
now he wants to do the following things help him

1. He want to add a new element 60 in the tuple, which statement he should use out of the given four.

- i. `>>>t+(60)`
 ii. `>>>t + 60`
 iii. `>>>t + (60,)`
 iv. `>>>t + ('60')`
- 92 Rahul wants to delete all the elements from the tuple, which statement he should use
 i. `>>>del t`
 ii. `>>>t.clear()`
 iii. `>>>t.remove()`
 iv. `>>>None of these`
- 93 Rahul wants to display the last element of the tuple, which statement he should use
 i. `>>> t.display()`
 ii. `>>>t.pop()`
 iii. `>>>t[-1]`
 iv. `>>>t.last()`
- 94 Rahul wants to add a new tuple t1 to the tuple t, which statement he should use
 i. `>>>t+t1`
 ii. `>>>t.add(t1)`
 iii. `>>>t*t1`
 iv. None of these
- 95 Rahul has issued a statement after that the tuple t is replace with empty tuple, identify the statement he had issued out of the following:
 i. `>>> del t`
 ii. `>>>t= tuple()`
 iii. `>>>t=Tuple()`
 iv. `>>>delete t`
- 96 Rahul wants to count that how many times the number 10 has come:
 i. `>>>t.count(10)`
 ii. `>>>t[10]`
 iii. `>>>count.t(10)`
 iv. None of these
- 97 Rahul want to know that how many elements are there in the tuple t, which statement he should use out of the given four
 i. `>>>t.count()`
 ii. `>>>len(t)`
 iii. `>>>count(t)`
 iv. `>>>t.sum()`
- 98 `>>>t=(1,2,3,4)`
 Write the statement should be used to print the first three elements 3 times
 i. `>>>print(t*3)`
 ii. `>>>t*3`
 iii. `>>>t[:3]*3`
 iv. `>>>t+t`
- 99 Match the output with the statement given in column A with Column B
- | | |
|--|--|
| 1. <code>>>>tuple([10,20,30])</code> | a. <code>>>> (10,20,30)</code> |
| 2. <code>>>>("Tea",)* 3</code> | b. <code>>>> 2</code> |
| 3. <code>>>>tuple("Item")</code> | c. <code>>>> ('Tea', 'Tea', 'Tea')</code> |
| 4. <code>>>>print(len(tuple([1,2])))</code> | d. <code>>>> ('I', 't', 'e', 'm')</code> |
- i. 1-b,2-c,3-d,4-a
 ii. 1-a,2-c,3-d,4-b
 iii. 1-c,2-d,3-a,4-a
 iv. 1-d,2-a,3-b,4-c

100 Write the output of the following code:

```
>>>d={'name':'rohan','dob':'2002-03-11','Marks':'98'}
>>>d1={'name':'raj')
>>>d1=d.copy()
>>>print("d1 :",d1)
i.      d1 : {'name': 'rohan', 'dob': '2002-03-11', 'Marks': '98'}
ii.     d1 = {'name': 'rohan', 'dob': '2002-03-11', 'Marks': '98'}
iii.    {'name': 'rohan', 'dob': '2002-03-11', 'Marks': '98'}
iv.     (d1 : {'name': 'rohan', 'dob': '2002-03-11', 'Marks': '98'})
```