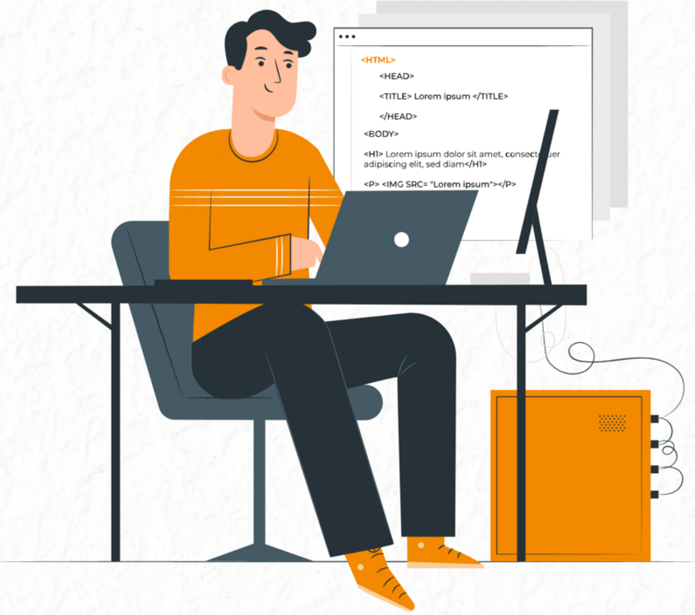
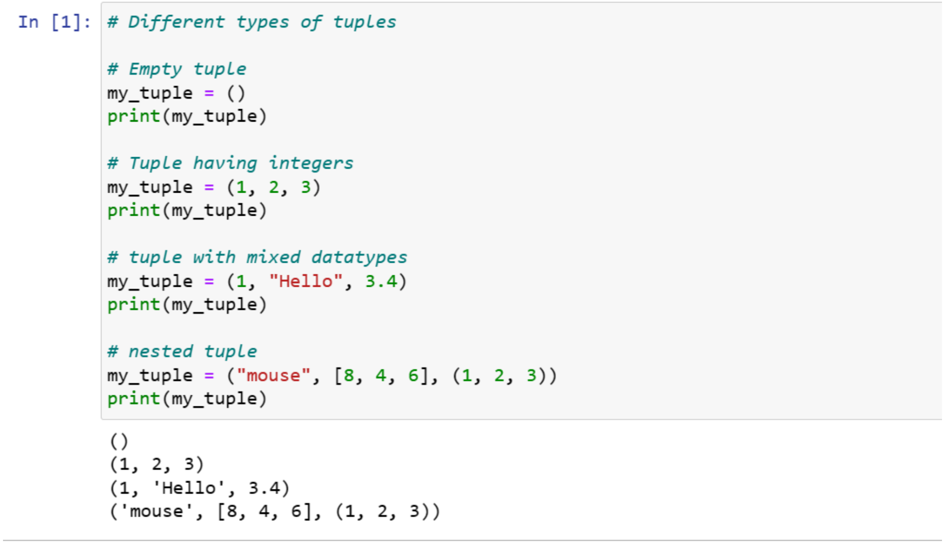
iNeuron


<HTML>
<HEAD>
<TITLE> Lorem ipsum </TITLE>
</HEAD>
<BODY>
<H1> Lorem ipsum dolor sit amet, consect uer adipiscing elit, sed diam</H1>
<P> <IMG SRC= "Lorem ipsum"></P>

Python

Interview Questions

1. Present different types of tuples.

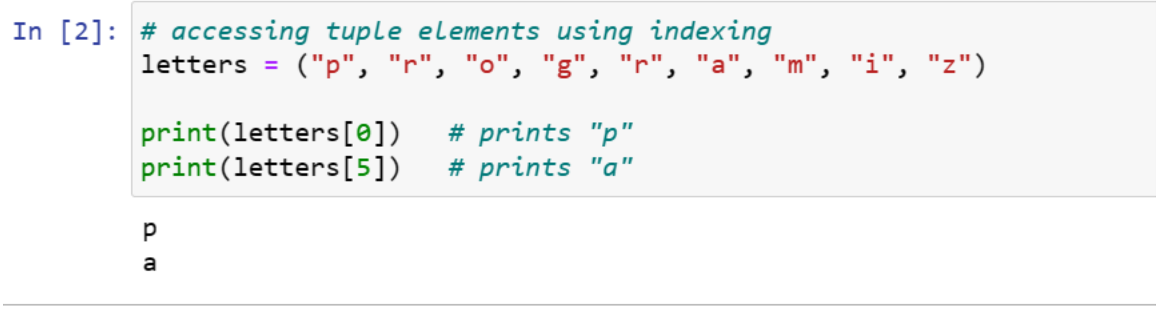


```
In [1]: # Different types of tuples

        # Empty tuple
        my_tuple = ()
        print(my_tuple)

        # Tuple having integers
        my_tuple = (1, 2, 3)
        print(my_tuple)

        # tuple with mixed datatypes
        my_tuple = (1, "Hello", 3.4)
        print(my_tuple)

        # nested tuple
        my_tuple = ("mouse", [8, 4, 6], (1, 2, 3))
        print(my_tuple)
```

```
()
(1, 2, 3)
(1, 'Hello', 3.4)
('mouse', [8, 4, 6], (1, 2, 3))
```

2. How to access Python Tuple Elements

Ans- We can use the index operator [] to access an item in a tuple, where the index starts from 0.
So, a tuple having **6** elements will have indices from **0** to **5**. Trying to access an index outside of the tuple index range (6**, 7, ...** in this example) will raise an Index Error.
The index must be an integer, so we cannot use float or other types. This will result in Type Error.
Likewise, nested tuples are accessed using nested indexing, as shown in the example below.



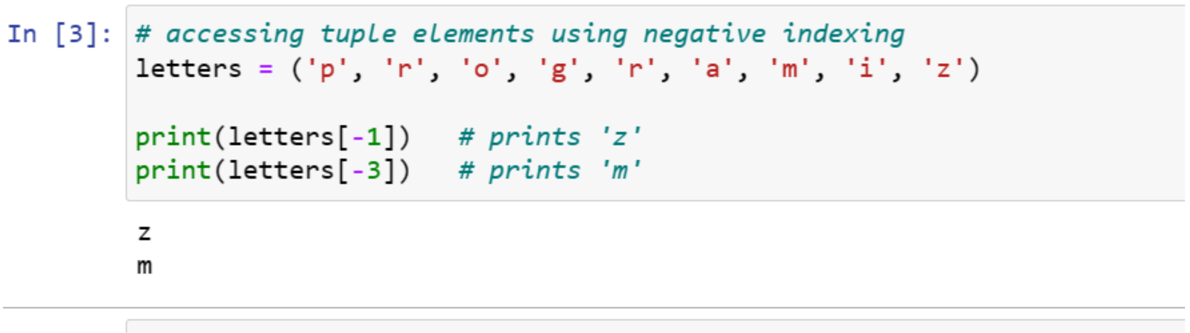
```
In [2]: # accessing tuple elements using indexing
        letters = ("p", "r", "o", "g", "r", "a", "m", "i", "z")

        print(letters[0])   # prints "p"
        print(letters[5])   # prints "a"
```

```
p
a
```

3. How to use negative indexing in tuple?

Ans- Python allows negative indexing for its sequences.

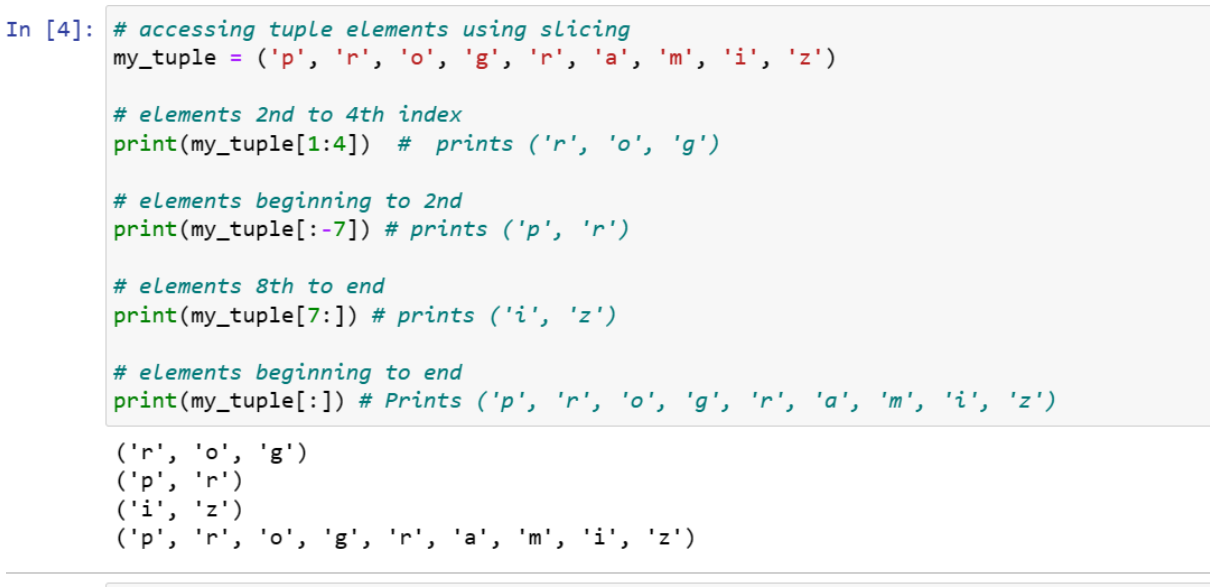
The index of **-1** refers to the last item, **-2** to the second last item and so on. For example,



```
In [3]: # accessing tuple elements using negative indexing
        letters = ('p', 'r', 'o', 'g', 'r', 'a', 'm', 'i', 'z')

        print(letters[-1])   # prints 'z'
        print(letters[-3])   # prints 'm'

        z
        m
```

4.Usage of slicing in tuple.

Ans- We can access a range of items in a tuple by using the slicing operator colon:



```
In [4]: # accessing tuple elements using slicing
        my_tuple = ('p', 'r', 'o', 'g', 'r', 'a', 'm', 'i', 'z')

        # elements 2nd to 4th index
        print(my_tuple[1:4])  #  prints ('r', 'o', 'g')

        # elements beginning to 2nd
        print(my_tuple[:-7]) # prints ('p', 'r')

        # elements 8th to end
        print(my_tuple[7:]) # prints ('i', 'z')

        # elements beginning to end
        print(my_tuple[:]) # Prints ('p', 'r', 'o', 'g', 'r', 'a', 'm', 'i', 'z')

        ('r', 'o', 'g')
        ('p', 'r')
        ('i', 'z')
        ('p', 'r', 'o', 'g', 'r', 'a', 'm', 'i', 'z')
```

5. Which of the following is invalid variable?
   a) string_123
   b) _hello

c) 12_hello
d) None of these

Answer – c) 12_hello

6. Is python identifiers case sensitive?
a) False
b) True
c) Depends on program
d) Depends on computer

Answer – b) True

7. Which of the following statements is true regarding Python?
a) Python does not support object-oriented programming.
b) Python uses indentation to indicate block structure.
c) Python is a compiled language.
d) Python is a statically typed language.

Answer – b) uses indentation to indicate block structure.

8. List in Python is ....in nature.
a) functionable
b) mutable
c) immutable
d) None of these

Answer- b) mutable

9. Which of the following is NOT a valid type code for Python array?
a) 'i'
b) 'f'

c) 'd'
d) 's'

Answer – d) 's'

10. What is the output of the following Python code?

```
import array
a = array.array('i', [1, 2, 3])
print(a[0])
```

a) 0
b) 2
c) 1
d) 3

Answer – c) 1

11. When was Python 3.0 released?

a. 3 December 2008
b. 4 December 2008
c. 5 December 2008
d. 3 December 2010

Answer- 1. The new version of Python 3.0 was released on December 3, 2008.

12. Who founded Python?

a. Alexander G. Bell
b. Vincent van Gogh
c. Leonardo da Vinci
d. Guido van Rossum

Answer. d. The idea of Python was conceived by Guido van Rossum in the later 1980s.

13. What are the people who specialize in Python called?
    a. Pythonic
    b. Unpythonic
    c. Monty Python
    d. Pythonistas

Answer. d. the people who specialize, or are great admirers of this programming language are called as Pythonistas. They are extremely knowledgeable people.

14. What is the type of programming language supported by Python?
    a. Object-oriented
    b. Functional programming
    c. Structured programming
    d. All of the above

Answer. d. Python is an interpreted programming language, supporting object-oriented, structured, and functional programming.

15. All the keywords in Python are in_
    a. Lower case
    b. Upper case
    c. Capitalized
    d. None of the above

Answer. d. Only True, False and None are capitalized and all the others in lower case.

16. What is the order in which namespaces in Python looks for an identifier?
    a. First, the python searches for the built-in namespace, then the global namespace and then the local namespace

b. Python first searches for the built-in namespace, then local and finally the global namespace
c. Python first searches for local namespace, then global namespace and finally the built-in namespace
d. Python searches for the global namespace, followed by the local namespace and finally the built-in namespace.

Answer. C. Python first searches for the local namespace, followed by the global and finally the built-in namespace.

17. What is Python code-compiled or interpreted?

a. The code is both compiled and interpreted
b. Neither compiled nor interpreted
c. Only compiled
d. Only interpreted

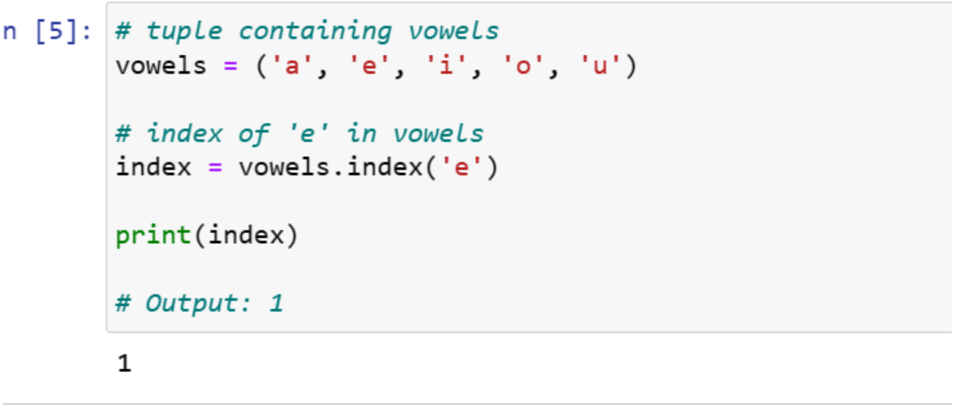
Answer. b. There are a lot of languages which have been implemented using both compilers and interpreters, including C, Pascal, as well as python.

18. What is the function of pickling in python?

a. Conversion of a python object
b. Conversion of database into list
c. Conversion of byte stream into python object hierarchy
d. Conversion of list into database

Answer. a. The process of pickling refers to sterilizing a Python object, which means converting a byte stream into python object hierarchy. The process which is the opposite of pickling is called unpickling.

19. How to create a python tuple index?



```
n [5]: # tuple containing vowels
       vowels = ('a', 'e', 'i', 'o', 'u')

       # index of 'e' in vowels
       index = vowels.index('e')

       print(index)

       # Output: 1

       1
```

20.what are the numeric data types in python?

Ans- In Python, numeric data type is used to hold numeric values. Integers, floating-point numbers and complex numbers fall under Python numbers category. They are defined as int, float and complex classes in Python.

- int - holds signed integers of non-limited length.
- float - holds floating decimal points and it's accurate up to 15 decimal places.
- complex - holds complex numbers.