Research and discuss the different data structures with built-in support available to programmers in Python (e.g., Lists, Tuples, Sets, Dictionaries).

1. **What is the use case for each data structure?**

A list, defined as an ordered collection of items, is one of the data structures necessary while developing a project in Python. The term "ordered collection" refers to each item in the list being in a specific order. The order of the components is a property of the list that remains constant throughout time.

A tuple is a Python data structure that represents an ordered set of items. Unlike lists, the utility of tuples is limited. The primary distinction between lists and tuples is that tuples may be changed. Lists are changing, but tuples are immutable. Tuples cannot be modified, added to, or withdrawn after they have been generated. The components of a list are surrounded by parentheses and separated by commas.

1. **Differentiate between a list and tuple. How are they represented?**

Lists are similar to arrays. Lists do not have to be uniform all of the time, making them Python's most powerful feature. A list is a sort of container in a Python Data Structure that is used to hold several pieces of data simultaneously. Lists are useful for storing and iterating through a succession of data.

The tuple is a sequence data type that contains many data types, yet it is immutable. In other terms, a tuple is a collection of Python objects separated by commas. Because of their static nature, tuples are quicker than lists.

1. **What is the difference between a list and an array?**

In Python, a list is a collection of things that can include components of various data kinds, such as numeric values, logical characters, and so on. It's a sorted set that allows for negative indexing. [] containing data values can be used to make lists.

A vector having homogeneous items, that is, elements of the same data type, is called an array. Elements are given contiguous memory regions, making it simple to modify them by adding, removing, and accessing them. To declare arrays in Python, we must utilize the array module.

1. **How can one create an array in Python?**

from array import

array1 = array('i', [10,20,30,40,50])

for x in array1:

print(x)