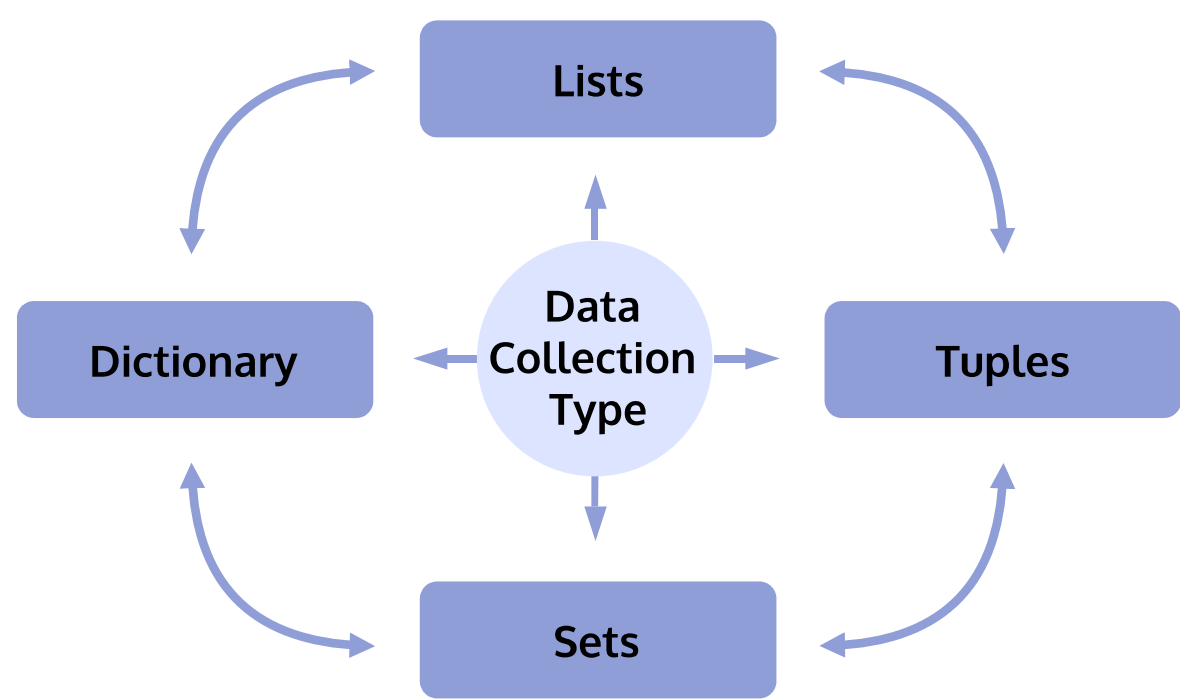


# Python Collections



## Lists

- Lists are created with square brackets
- Lists are ordered, changeable, and allow duplicate values.
- They are also indexed, the first item in a list has the index [0], the next item will have the index [1], and so on.
- Example: ["chocolate", "vanilla", "berry"]



## Tuples

- Tuples are used to store multiple items in a single variable.
- In a tuple, the collection is ordered and unchangeable, it allows duplicate values.
- They are written in round brackets
- They index like lists first is [0]...
- Example: ("chocolate", "vanilla", "berry")



## Sets

- A set is a collection which is unordered, unchangeable, and unindexed.
- Set items are unchangeable, but you can add and remove items.
- You will never know the order of items a set will appear in.
- They also do not allow duplicate values.
- If the set has duplicate values, they will be ignored.
- Sets are written inside of curly brackets.
- Example: thisset = {"abc", "def", "ghi"}



## Dictionary

- Dictionaries are made to store data in key: value pairs.
- The collection is ordered, changeable, and does not allow duplicates.
- They are written in curly brackets and have keys and values.
- Example:

```
thisdict = {
  "name": "earth",
  "color": "blue",
  "moons": "1"
}
```



## What do collections do?

- They store our data in python accurately.
- They provide structure for our data, making it readable.
- They make it convenient, these data structures are used to simplify python for the user.