a) Basically list and tuple serve the purpose of storing data. They look quite similar. But the major difference between the two is that list is editable whereas tuple is non-editable. Tuple is represented using () whereas list is represented using [].

b) List and dictionary are different from each other. Dictionary uses keys to store values whereas values in a list are denoted by indices. List is ordered whereas dictionary is unordered. Also list is represented by [] whereas dictionary is represented by {}.

c) Declarative languages are very high level programming languages in which a program specifies what is to be done rather than how to do it. It relies on underlying components of a given language to carry out the necessary steps to reach the stated outcome. In declarative programming, typical programming constructs such as loops and if/then conditions do not exist, because they are instructional.

d) In a programming language, a function or expression can have a side effect if it modifies a state outside its scope or has an observable interaction with its calling functions or the outside world.

e) A list comprehension is a syntactic construct which creates a list based on existing list. It is an elegant way to define and create list in Python. These lists have the qualities of sets, but are not in all cases sets. Mathematical notation is a system of symbolic representations of mathematical objects and ideas. Mathematical notations are used in mathematics, programming etc. Mathematical notations include relatively simple symbolic representations, such as the numbers 0, 1 and 2; function symbols such as sin; operator symbols such as "+" ; variables etc.

f) A Python program accesses data values . A reference is a name that refers to the specific location in memory of a value object. References take the form of variables, attributes, and items. The object to which a reference is bound at a given time does have a type. Variables are reserved memory locations to store values. This means that when you create a variable you reserve some space in memory. Based on the data type of a variable, the interpreter allocates memory and decides what can be stored in the reserved memory.