

1. What is Polymorphism?
 Define dynamic and static polymorphism? Define unpacking sequences with example. Define Tuple in python with example.

Polymorphism :- In literal sense, Polymorphism means the ability to take various forms. In Python, Polymorphism allows us to define methods in the child class with the same name as defined in their parent class.

Static Polymorphism :- Static Polymorphism is Polymorphism that occurs at compile time and dynamic not executed. An aspect of static polymorphism is early binding. In early binding, the specific method to call is resolved at compile time.

Dynamic Polymorphism :-
Dynamic Polymorphism method dispatch is a process in which is resolved at runtime rather than at compile time. In this process, an overridden method is called through the reference variable of super class.

Unpacking Sequence :-
Python allows unpacking of any sequence of any sequence into variables using a simple assignment operation. Unpacking can be done by assigning sequence to comma separated variable.

Example :-

unpacking P into variable x and y

$P = (100, 200)$

$x, y = P$

Print (x)
Print (y)

Output :-

100

200

tuple :- A tuple is a collection of objects which ordered and immutable.

Tuples are sequence, just like lists. The difference tuple and list are the tuple cannot be change like list and tuple use parentheses.

example :-

tup = (1, 2, 3, 4, 5);

tup = (); empty tuple.