

Q1 Diff b/w Call by value & Call by reference
Ans Call by value - In this the value of actual parameters are copied to the function formal parameters.

These are stored in different memory location. One is Original copy & other is function copy. Any change in inside function are not reflected in the actual parameter.

→ Call by reference - In this the address of actual parameter is passed to the function as the formal parameter. In C, we use pointers to achieve call by reference.

- Both the actual & formal parameter refers to the same location.
- Any changes inside the function are actually reflected in the actual parameter.

Q2 What is ASCII value and UTF value

Ans ASCII - It define codepoint values until 0-127, but it doesn't define their encoding. All language encoding use the same value as ASCII for their first 128 character.

UTF values - UTF encoding are all 8 bit encoding that support ASCII value.

UTF-16 & UTF-32 etc are 16/32 bit encoding that also support ASCII value.

Q3 Different data type in Python

A Python provides the following built-in datatype

1) Numeric data : int, float, complex

2) Text data : str → "Hello World"

3) Boolean data : True / False

4) Sequence data : list, ~~tuple~~ tuples

• list : It is a collection of data, separated by comma & enclosed with square brackets.

It is mutable & can be modified after creation

eg- list = [8, 0.9, [-4, 5]]

• Tuple : It is immutable & cannot be modified after creation

eg- tuple = ("Hello", "World")

5) Mapped data : dict

→ dict : A dictionary is an ~~and~~ unordered collection of data containing a key-value pair. The key-value pairs are enclosed with curly brackets

Ex - dict = { "name": "Sam", "age": 22 }

Q4 Diff b/w is operator & == Operator

→ is operator - Also known as Identity operator.
This operator check if two variable point to the same object in memory then return True. if both refers to exact the same object. If they point to the different object, even there values are same, it return false.

→ == operator → Also known as Equality or Comparison operator.

When the variable on either side have exact the same value then it return true else it return false.