Called by the repr() built-in function to compute the "official" string representation of an object. If at all possible, this should look like a valid Python expression that could be used to recreate an object with the same value (given an appropriate environment). If this is not possible, a string of the form <...some usefuldescription...> should be returned. The return value must be a string object. If a class defines __repr__() but not__str__(), then __repr__() is also used when an "informal" string representation of instances of that class is required.

This is typically used for debugging, so it is important that the representation is information-rich and unambiguous.

Called by str(object) and the built-in functions format() and print() to compute the "informal" or nicely printable string representation of an object. The return value must be a string object.

This method differs from object.__repr__() in that there is no expectation that__str__() return a valid Python expression: a more convenient or concise representation can be used.

The default implementation defined by the built-in typeobject callsobject.__repr__().