**Python: str() vs repr()**

The following example gives a gist that the two are not the same:

a = 'Jerubbaal'

b= [1,2,3,4,5]

str(a)

Out[20]: 'Jerubbaal'

repr(a)

Out[21]: "'Jerubbaal'"

str(b)

Out[22]: '[1, 2, 3, 4, 5]'

repr(b)

Out[23]: '[1, 2, 3, 4, 5]'

In general str() tends be more readable while repr() tends to be unambiguous. It is shown below:

str(datetime.now())

Out[24]: '2018-05-09 21:51:48.600000'

repr(datetime.now())

Out[25]: 'datetime.datetime(2018, 5, 9, 21, 51, 52, 923000)'

Another example:

a = datetime.now()

b = str(a)

str(a)

Out[29]: '2018-05-09 23:17:26.570000'

str(b)

Out[30]: '2018-05-09 23:17:26.570000'

repr(a)

Out[31]: 'datetime.datetime(2018, 5, 9, 23, 17, 26, 570000)'

repr(b)

Out[32]: "'2018-05-09 23:17:26.570000'"

From the example above the repr() is useful more for developers who actually understand terminology used in python. In the case above repr() outputs two different representations of the similar input one is dataetime object the other is a string. It expresses a sense of meaning in developer terms.

For non-developers and normal users the str() suffices well due to readability.