1.Differences between python 2 and python 3

**Division operator**

print 7 / 5

print -7 / 5

Output in Python 2.x is:

1

-2

Output in Python 3.x is:

1.4

-1.4

**Print Function**

print 'Hello, people'      # Python 3doesn't support

print('Hope You like these facts')

'''

Output in Python 2:

Hello, people

Hope You like these facts

Output in Python 3 :

File "a.py", line 1

    print 'Hello, people'

                       ^

SyntaxError: invalid syntax

**Unicode**

In Python 2, implicit str type is ASCII. But in Python 3 implicit str type is Unicode.

|  |
| --- |
| print(type('default string '))    Output in Python 2.x (Bytes is same as str)  <type 'str'>  Output in Python 3.x (Bytes and str are different)  <class 'str'> |

Python 2.x also supports Unicode

|  |
| --- |
| print(type('default string '))  print(type(u'string with b '))    '''  Output in Python 2.x (Unicode and str are different)  <type 'str'>  <type 'unicode'>    Output in Python 3.x (Unicode and str are same)  <class 'str'>  <class 'str'> |

**Range:**

for x in xrange(1, 5):

    print(x),

for x in range(1, 5):

    print(x),

'''

Output in Python 2.x

1 2 3 4 1 2 3 4

Output in Python 3.x

NameError: name 'xrange' is not defined

'''

**Error handling:**

try:

    trying\_to\_check\_error

except NameError, err:

    print err, 'Error Caused'   # Would not work in Python 3.x

'''

Output in Python 2.x:

name 'trying\_to\_check\_error' is not defined Error Caused

Output in Python 3.x :

File "a.py", line 3

    except NameError, err:

                    ^

SyntaxError: invalid syntax

'''

**Paranthesis: not in python-2 present in3.**