Differences between Python 2 and 3:

| Difference | Python 2 | Python 3 |
|---------------------------|---|--|
| ASCII + Unicode | Strings are stored as ASCII by default—you have to add a "u" if you want to store strings as Unicode. | Text strings are Unicode by default. |
| print statement syntax | print functional brackets optional. | print functional brackets compulsory. |
| Integer Division | Division of integers always return integer – 5/2=2. | Division of integers may result in float $-5/2=2.5$ |
| Input Function | input() evaluates data read. | Input always reads string. |
| xrange function | Support range() and xrange() both. | have no xrange() function but range() function will behave like xrange() in python 2. |
| Library | Many older libraries built for Python 2 are not forwards-compatible. | Many of today's developers are creating libraries strictly for use with Python 3. |
| Raising exception syntax | raise IOError, "file not found" | raise IOError("file not found") |

| Leak of for-loop variables in global namespace | value of a global variable had changed while using that variable in for-loop. | for loop variables don't leak into the global namespace anymore! |
|--|---|--|
| .next() method | have next() function and .next() method for iterate next element. | Have only next() function. |