Major Differences betweeen Python 2x and 3x:

* [Division operator](https://www.geeksforgeeks.org/important-differences-between-python-2-x-and-python-3-x-with-examples/#Division%20operator):

Python 2x: ‘/’ performs floor divison, returns integer unless one of the operands is a float, ‘//’ performs float division

Python 3x: ‘/’ normal float division

* [print function](https://www.geeksforgeeks.org/important-differences-between-python-2-x-and-python-3-x-with-examples/#print%20function):

Python 2x: print command does not require parenthesis. Ex: print “hello”

Python 3x: print command requires a pair of parenthesis. Ex: print (“hello”)

* [Implicit](https://www.geeksforgeeks.org/important-differences-between-python-2-x-and-python-3-x-with-examples/#Unicode) string pattern

Python 2x: ASCII

Python 3x: UNICODE

* [xrange](https://www.geeksforgeeks.org/important-differences-between-python-2-x-and-python-3-x-with-examples/#xrange)

Python 2x: xrange returns an iterator

Python 3x: xrange does not exist, range is used instead

* [Error Handling](https://www.geeksforgeeks.org/important-differences-between-python-2-x-and-python-3-x-with-examples/#Error%20Handling)

Python 2x: no ‘as’ keyword required in syntax

Python 3x: ‘as’ keyword required in syntax

Domains and tools:

1. Web and Internet Development

* Frameworks such as Django and Pyramid.
* Micro-frameworks such as Flask and Bottle.
* Advanced content management systems such as Plone and django CMS.

Libraries:

* Requests, a powerful HTTP client library.
* BeautifulSoup, an HTML parser that can handle all sorts of oddball HTML.
* Feedparser for parsing RSS/Atom feeds.
* Paramiko, implementing the SSH2 protocol.
* Twisted Python, a framework for asynchronous network programming.

1. Desktop GUIs

Some toolkits that are usable on several platforms are available separately:

* wxWidgets
* Kivy, for writing multitouch applications.
* Qt via pyqt or pyside
* GTK+
* Microsoft Foundation Classes through the win32 extensions

1. Software Development

Python is often used as a support language for software developers, for build control and management, testing, and in many other ways.

* SCons for build control.
* Buildbot and Apache Gump for automated continuous compilation and testing.
* Roundup or Trac for bug tracking and project management.

1. Business Applications

Python is also used to build ERP and e-commerce systems:

* Odoo is an all-in-one management software that offers a range of business applications that form a complete suite of enterprise management applications.
* Tryton is a three-tier high-level general purpose application platform.

1. Machine Learning and data Science:

* Numpy
* Pandas
* Scipy
* Scikit
* Matplotlib
* Seaborn
* TensorFlow

Tools to execute Python code:

* PyDev
* PyCharm
* Eric
* Netbeans
* Sublime Text
* Visual Studio