

### Q 3.What is the difference between Python 2 and Python 3?

Topic	Python 2	Python 3
Print Statement	<code>`print "Hello, World!"`</code>	<code>`print("Hello, World!")`</code>
Integer Division	Dividing integers truncates the result to an integer (e.g., <code>`5/2 = 2`</code> )	Dividing integers returns a float (e.g., <code>`5/2 = 2.5`</code> )
Unicode Support	Strings are ASCII by default; Unicode requires a <code>`u`</code> prefix (e.g., <code>`u"Hello"`</code> )	Strings are Unicode by default (e.g., <code>`"Hello"`</code> )
Range Function	<code>`range()`</code> returns a list, which can be memory-intensive for large ranges	<code>`range()`</code> returns an iterator, which is more memory-efficient
Error Handling	Uses <code>`except Exception, e`</code> for exception handling	Uses <code>`except Exception as e`</code> for exception handling
Libraries and Compatibility	Some libraries were built specifically for Python 2 and are not compatible with Python 3	New libraries and features are developed for Python 3, with broader support
Iteration	<code>`dict.items()`</code> returns a list of key-value pairs	<code>`dict.items()`</code> returns a view object, which is more memory-efficient
Support and Updates	Python 2 reached end-of-life on January 1, 2020, and is no longer supported	Python 3 is actively maintained and continuously updated with new features