

Cues:	Notes:
File path parts	1. Reading and writing files: a. File paths: i. Paths all have two parts: a <i>directory path</i> and a <i>filename</i> . Paths only containing a partial directory specification (e.g. <code>.\Project.docx</code>) are called <i>relative</i> paths, while full paths (e.g. <code>C:\Users\Guest\Documents\Project.docx</code>) are called <i>absolute</i> or <i>fully-qualified</i> paths.
Absolute vs relative paths	
'.' and '..' paths	ii. Standard relative-path implementations can use two special folders, known as the <i>dot</i> (".") and <i>dot-dot</i> (".") folders. These refer to the current folder and its parent folder, respectively.
Platform path differences	iii. Paths use drive letters and escaped backslashes on Windows (e.g. <code>C:\\Users\\Zach</code>), while using root folders and forward slashes on UN*X / POSIX-style systems (e.g. <code>/home/</code>).
os.path.join()	1. This can be done automatically using the <code>os.path.join()</code> function. Example: <pre>>>> import os >>> os.path.join('C:', 'Users', 'Zach') 'C:\\Users\\Zach'</pre>
Current working directory	iv. The current working directory can be set or retrieved using <code>os.chdir()</code> or <code>os.getcwd()</code> , respectively. Example: <pre>>>> import os >>> os.getcwd() '/home/Zach' >>> os.chdir('/usr/local/bin') >>> os.getcwd() '/usr/local/bin'</pre>
Creating new folders	v. New folders can be created recursively with the <code>os.makedirs()</code> function. Example: <pre>>>> import os os.makedirs('C:\\Projects\\NewProject\\SecretStuff\\Code')</pre>

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Checking existence	vi. Paths and files can be checked for existence and differentiated using <code>os.path.exists()</code> , <code>os.path.isfile()</code> , and <code>os.path.isdir()</code> .
Using files	b. Working with files: i. Files can be opened, closed, read, and written to using <code>open()</code> (which expects a filename and open mode and returns a File object), <code>.read()</code> (which reads the file in to a string), <code>.write()</code> (which overwrites or appends a given string to the file, depending on the open mode), and <code>.close()</code> , respectively. Example: <pre>>>> spamFile = open('spam.txt', 'w') >>> spamFile.write('Hello World!\n') >>> spamFile.close() >>> spamFile = open('spam.txt', 'r') >>> fileContents = spamFile.read()</pre>
Summary/Reflection:	