



Debugging – The Stack Trace

Model-Answer Approach

[](http://www.hyperiondev.com/portal/)

# Auto-graded task 1

In the original code found in the provided **debugging.py** file, there are a few key issues that need to be resolved to meet the expected output. First, the function print\_values\_of is designed to print values from a dictionary based on the provided keys. However, the function signature expects keys to be a single argument rather than multiple key arguments, which causes a mismatch when passing multiple keys. Additionally, inside the function, the variable k is used to retrieve dictionary values, but this variable is undefined, leading to a NameError.

The next problem lies in the way the keys are passed to the function. The original implementation passes 'lisa', 'bart', 'homer' as individual arguments rather than as a list, which is necessary for the function as currently designed. Lastly, the simpson\_catch\_phrases dictionary contains a syntax error in Homer’s catchphrase. The apostrophe within 'd'oh!' breaks the string, which leads to a SyntaxError.

In the model answer, the approach involves fixing these errors step by step. First, we update the function to take keys as a list of keys rather than individual arguments. Inside the function, we replace the undefined variable k with key to correctly reference the current key in the loop. Next, we modify the function call to pass the keys as a list ['lisa', 'bart', 'homer'] instead of individual arguments. Finally, the syntax error in Homer’s catchphrase is corrected by changing the single quotes around 'd'oh!' to double quotes, in order to avoid the conflict caused by the apostrophe.

A possible pitfall to watch for is forgetting to pass the keys as a list when calling the function, as this would result in a TypeError. Another common issue could be accidentally accessing keys that don’t exist in the dictionary, which would raise a KeyError. Adding error handling, such as checking for the presence of keys or using the .get() method, could be useful for working on similar tasks.