# Slide-4-Eager-Execution-word2vec

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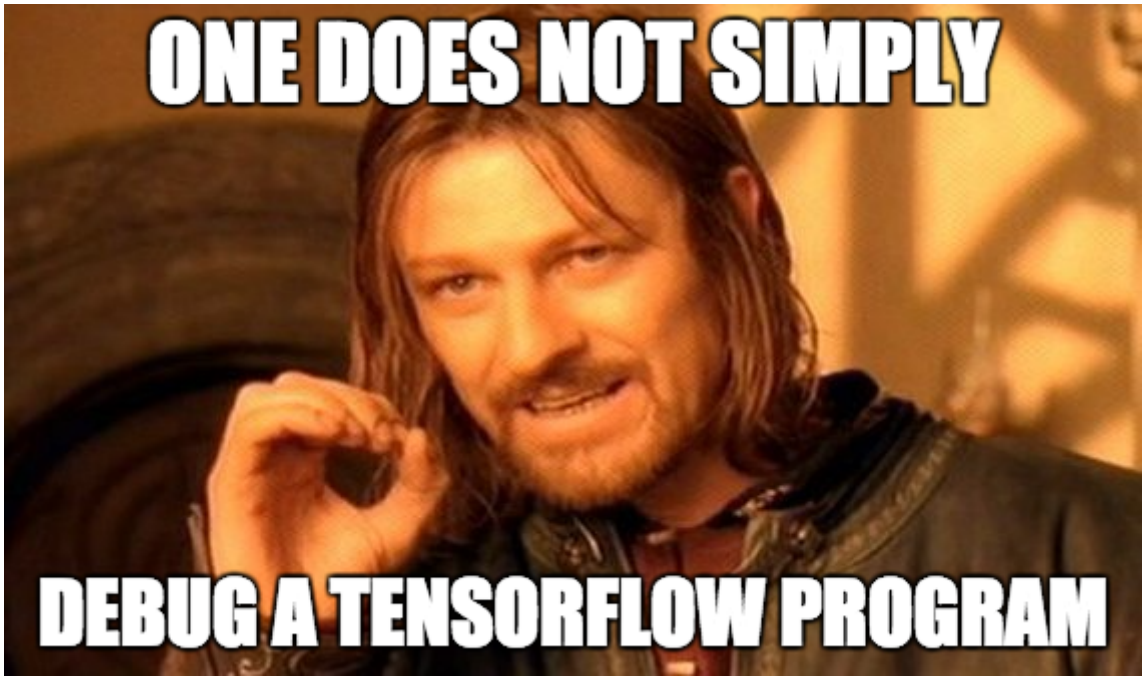
## Recap

▼ Old fashion Tensorflow?

TensorFlow is, in some loose sense, both a programming language and a compiler for machine learning models

▼ The difficulties?

- Difficult to debug: error hard to follow, execution cannot be debug!
- Un-Pythonic: Writing TF like metaprogramming!




## Eager Execution

▼ Definition?

A NumPy-like library for numerical computation with support for GPU acceleration and automatic differentiation, and a flexible platform for machine learning research and experimentation.

▼ Key advantages?

- Compatible with Python debugging tools (`pdb.set_trace()` in the head's content)
- Providing immediate error reporting
- Permit use of Python data structures
- Enable easy, Pythonic control flow

▼ A colection of Operations?

TensorFlow = Operation Kernels + Execution

- Graph construction: Execute compositions of operations with Sessions
- Eager execution: Execute compositions with Python

▼ Incase you should use eager?

- a researcher and want a flexible framework
- developing a new model
- new to TensorFlow