✓ **Congratulations! You passed!**
TO PASS 80% or higher

[Keep Learning]

GRADE
100%

Week 3 Quiz

LATEST SUBMISSION GRADE

100%

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1. **If X is the standard notation for the input to an RNN, what are the standard notations for the outputs?**

   1 / 1 point

   ○ Y

   ○ H

   ⦿ Y(hat) and H

   ○ H(hat) and Y

   ✓ Correct

2. **What is a sequence to vector if an RNN has 30 cells numbered 0 to 29**

   1 / 1 point

   ○ The average Y(hat) for all 30 cells

   ⦿ The Y(hat) for the last cell

   ○ The Y(hat) for the first cell

   ○ The total Y(hat) for all cells

   ✓ Correct

3. **What does a Lambda layer in a neural network do?**

   1 / 1 point

   ⦿ Allows you to execute arbitrary code while training

   ○ Pauses training without a callback

   ○ Changes the shape of the input or output data

   ○ There are no Lambda layers in a neural network

   ✓ Correct

4. **What does the axis parameter of tf.expand_dims do?**

   1 / 1 point

   ○ Defines the dimension index to remove when you expand the tensor

   ⦿ Defines the dimension index at which you will expand the shape of the tensor

   ○ Defines if the tensor is X or Y

   ○ Defines the axis around which to expand the dimensions

   ✓ Correct

5. **A new loss function was introduced in this module, named after a famous statistician. What is it called?**

   1 / 1 point

   ○ Hyatt loss

   ⦿ Huber loss

   ○ Hubble loss

   ○ Hawking loss

   ✓ Correct

6. **What's the primary difference between a simple RNN and an LSTM**

   1 / 1 point

   ⦿ In addition to the H output, LSTMs have a cell state that runs across all cells

   ○ In addition to the H output, RNNs have a cell state that runs across all cells

   ○ LSTMs have multiple outputs, RNNs have a single one

   ○ LSTMs have a single output, RNNs have multiple

   ✓ Correct

7. **If you want to clear out all temporary variables that tensorflow might have from previous sessions, what code do you run?**

   1 / 1 point

   ○ tf.cache.backend.clear_session()

   ○ tf.keras.clear_session

   ○ tf.cache.clear_session()

   ⦿ tf.keras.backend.clear_session()

   ✓ Correct

8. **What happens if you define a neural network with these two layers?**

   1 / 1 point

   tf.keras.layers.Bidirectional(tf.keras.layers.LSTM(32)),

   tf.keras.layers.Bidirectional(tf.keras.layers.LSTM(32)),

   tf.keras.layers.Dense(1),

   ⦿ Your model will fail because you need return_sequences=True after the first LSTM layer

   ○ Your model will fail because you have the same number of cells in each LSTM

   ○ Your model will fail because you need return_sequences=True after each LSTM layer

   ○ Your model will compile and run correctly

   ✓ Correct