

**START OF QUIZ**  
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## Question 1

Topic: Lecture 7

Source: Lecture 7

We discussed slot error rate in class, but it's fully-supervised. Can you think of a distantly-supervised way to calculate essentially the same thing? (1)

## Question 2

Topic: Lecture 6

Source: Lecture 6

Neural Q/A (even before ChatGPT) was significantly better than previous models. Beyond just the traditional benefits of deep learning that we know of, (such as longer dependencies, etc.), why is this the case? (2)

### Question 3

Topic: Lecture 5

Source: Lecture 5

ChatGPT differs significantly from even other neural Q/A systems. Provide at least 2 significant differences, and briefly describe them. (2)

## Question 4

Topic: Lecture 7

Source: Lecture 7

Imagine that we have a great dialogue Q/A system that can fill slots with ease, and return relevant answers with high probability. However, our ASR system is pretty bad (it does really poorly with accents that are not "General American"). The model was trained on standard English text. Describe a few of the errors you can imagine the system making, and how we can improve the quality of our model (assume we can't improve the ASR). (2)

## Question 5

Topic: Lecture 6

Source: Lecture 6

Provide a reasonable logical representation of the question “Who starred in Casablanca?” (1)

## Question 6

Topic: Lecture 8

Source: Lecture 8

How is it that Eliza can use words / phrases that she doesn't have in her templates? (1)

## Question 7

Topic: Lecture 5

Source: Lecture 5

Explain why a good IR tool is necessary to perform Bert-based Q/A. (1)



## Question 8

Topic: Lecture 8

Source: Lecture 8

Why is it necessary to maintain a conversation history in a dialogue system (beyond just not asking the same question over and over again)? (1)

## Question 9

Topic: Coding

Source: Lecture 6

Watson was a very specialized tool designed specifically to play the game of Jeopardy. I've tried playing Jeopardy with ChatGPT, and it is terrible at it. Describe the process of fine-tuning ChatGPT to be better at Jeopardy. Describe at least 3 things that we would need to specifically train it to succeed at (ignore the "buzzing" in part). (3)

**END OF QUIZ**