

## Quiz 1 Answer Schema

**Q1. What are the factors affecting the Discrimination and Reliability of a Language Model? How?**

**Answer:**

1. The primary cause is the length of the horizon.
2. How-> Larger n-grams are rarer resulting in less reliability but carrying a lot of information resulting in better discrimination.

**Q2. How will you compare two language models trained on the same data? (How will you say which one is better?)**

**Answer:**

1. Perplexity over the same data. Explain in detail
2. Bonus for other unique ideas.

**Q3. What are the ways in which Language Models can avoid sparsity?**

**Answer:**

1. Avoiding sparsity is impossible :) Bonus if someone says this.
2. Smoothing and back-off.

**Q4. How can multiple Language models be combined to get better Language models? Give some examples of the models you know.**

**Answer:**

1. Interpolation and back-off.
  2. Model examples and explanations.
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