**Two types of LLMs**:

* Base LLM
* Instruction tuned LLM

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| **Base LLM:** | **Instruction tuned LLM:** |
| Predicts the next word, based on text training data.  Ex: Once upon a time, there was a unicorn  that lived in a magical forest with all her unicorn friends  BUT  Ex: What is the capital of France?  What is France’s largest city?  What is France’s population?  What is the currency of France? | Tries to follow instructions.  Fine-tune on instructions and good attempts at following those instructions.  Ex: What is the capital of France?  The capital of France is Paris.  RLHF: Reinforcement Learning with Human Feedback.  Helpful, Honest and Harmless. |

**Principles of Prompting:**

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| ­­­­­­­­­Principle 1:   * Write clear and specific instructions | Principle 2:   * Give model time to think |
| **Tactics:**  **Tactic 1: Use delimiters to clearly indicate distinct parts of the input**   * Delimiters can be anything like: ```, """, < >, <tag> </tag>, :   **Tactic 2: Ask for a structured output**   * JSON, HTML   **Tactic 3: Ask the model to check whether conditions are satisfied**  **Tactic 4: "Few-shot" prompting** | **Tactics:**  **Tactic 1: Specify the steps required to complete a task**  **Tactic 2: Instruct the model to work out its own solution before rushing to a conclusion** |

**Model Limitations:**

**Hallucination**

Makes statements that sound plausible but are not true.

**Reducing Hallucinations**

First find relevant information, then answer the question based on the relevant information.

**Iterative Prompt Development:**

Iterative Process

* Try something
* Analyze where the result does not give what you want?
* Clarify instructions, give more time to think
* Refine prompts with a batch of examples