**1.What are transformers and how they know about LLP, Chatgpt and how the chats have evolved to mimic human intelligence**

* Transformer architecture is the engine behind chatgpt. It is a type of neural network architecture that have significantly advanced the field of natural language processing
* LLMS and Chat gpt are progressively trained on diverse data sets which help them learn the structure of language. They also undergo fine tuning on specific data sets to improve their conversational abilities

1. Earlier chatbots- relied on rule based systems
2. Emergence of neural networks- improved the ability to understand context but struggled with longer dialogue
3. Advancement with transformers- can maintain context over longer exchanges and generate responses that feel human like

**2.List all the subsets of artificial intelligence and provide examples for each and tell which human behavior they mimic**

1. Machine learning- Detect fraud in financial transaction- predict customer behavior
2. Deep learning- computer vision- mimic visual and auditory perception
3. Robotics – industrial robots used in manufacturing – physical tasks and movement
4. Natural Language Processing- chatbots like chatgpt – communication and language understanding
5. Expert systems- spelling error suggestions – expert decision making