

1. Match each type of generative modeling approach with the model's input and output. ("Thing" could be text, image, sound, etc.)
    - Autoregressive
    - Latent variable
    - Diffusion
    - Given a noisy whole thing, model outputs a less-noisy whole thing
    - Given a generation "cut off" somewhere, model outputs the next thing
    - Given a vector of random numbers, model outputs a complete sample in one step
  2. Describe how ChatGPT, internally, works like a classifier. What is it classifying? What are the classes?
  3. Each of these problems can be addressed using generative AI – or not. Pick one or two and think of both classical and genAI approaches to solving it.
    - A chatbot psychotherapist
    - Adding sunglasses to a photo of a face
    - Classifying an email as spam or not spam
    - Erasing unwanted objects in an image
    - Identifying potential errors in code
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Before you leave, pick a couple of these questions to react to:

1. What was the most important concept from today for you?
2. What was the muddiest concept today?
3. How does what we did today connect with what you've learned before?
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