## M22ai608-Frey Face-AE-q2

## **Implementing variational Auto-encoders:**

- 1. Import Libraries and Load the dataset
- 2. Convert the data to PyTorch tensors
- 3. Define the Variational Autoencoder class
- 4. Create the VAE model with embedding vector size 20
- 5. Define the loss function and optimizer
- 6. Train the VAE model
- 7. Generate samples from the VAE model
- 8. Visualize the generated samples



**Finally,**Run the filename (M22ai608-Frey Face-AE-q2).py

**References:** Face Image Generation using Convolutional Variational Autoencoder and PyTorch <u>Face Image Generation using Convolutional Variational Autoencoder and PyTorch (debuggercafe.com)</u>