⬛ Weight Initialization:

➢ Weights are initialized randomly.
➢ Bias are all set to zero.
(Randomly initialized nagari same weight initialize garda euta layer nai euta neuron jasto act garxa i.e sab neuron haru ko value eutai maa change hunxa)

⬛ Gradient Problem :

➢ The gradient problem in deep learning is when the values used to adjust the neural network's weights become either very tiny (vanishing) or extremely large (exploding), making it difficult for the network to learn effectively.

➢ Changing the initialization method to have a certain variance of weights at initial state can help with unstable gradient problems .

⬛ Regularization:

➢ It is simply a way to cancel out some of the neurons.
➢ We use it to deal with overfitting of Neural Networks.
➢ It also has its own hyperparameters.