**Practical 2**

**Usage if Initializers**

1. ***Baseline model for classification on CIFAR10 dataset***

loss: 1.4640

acc: 0.4737

val\_loss: 1.5105

val\_acc: 0.4603

1. ***Model with Initializer as random uniform and zero***

loss: 1.4571

acc: 0.4773

val\_loss: 1.4673

val\_acc: 0.4795

1. ***Model with weights as ones***

loss: 14.5063

acc: 0.1000

val\_loss: 14.5063

val\_acc: 0.1000

1. ***Model initialized with constant value***

loss: 2.3027

acc: 0.0992

val\_loss: 2.3026

val\_acc: 0.1000

1. ***Random Normal***

loss: 1.4667

acc: 0.4748

val\_loss: 1.4949

val\_acc: 0.4652

1. ***Random Uniform***

loss: 1.4584

acc: 0.4782

val\_loss: 1.4513

val\_acc: 0.4890

1. ***Truncated Normal***

loss: 1.4590

acc: 0.4782

val\_loss: 1.4486

val\_acc: 0.4865

1. ***Variance Scaling***

loss: 1.4508

acc: 0.4818

val\_loss: 1.4495

val\_acc: 0.4860

1. ***Orthogonal***

loss: 1.5190

acc: 0.4586

val\_loss: 1.5585

val\_acc: 0.4411

1. ***Identity***

loss: 2.0564

acc: 0.1897

val\_loss: 2.0474

val\_acc: 0.1890

1. ***Lecun\_uniform***

loss: 1.4452

acc: 0.4819

val\_loss: 1.4938

val\_acc: 0.4692

1. ***Glorot\_normal***

loss: 1.4526

acc: 0.4815

val\_loss: 1.4702

val\_acc: 0.4772

1. ***Glorot\_uniform***

loss: 1.4541

acc: 0.4787

val\_loss: 1.4801

val\_acc: 0.4710

1. ***He\_mormal***

loss: 1.4651

acc: 0.4730

val\_loss: 1.4525

val\_acc: 0.4782

1. ***Lecun\_normal***

loss: 1.4723

acc: 0.4714

val\_loss: 1.4658

val\_acc: 0.4787

1. ***He\_uniform***

loss: 1.4595

acc: 0.4769

val\_loss: 1.4919

val\_acc: 0.4671