**For hidden node = 1**

Epoch 1/5

60000/60000 [==============================] - 2s 38us/step - loss: 2.0413 - acc: 0.2261

Epoch 2/5

60000/60000 [==============================] - 2s 34us/step - loss: 1.8507 - acc: 0.2804

Epoch 3/5

60000/60000 [==============================] - 2s 34us/step - loss: 1.7464 - acc: 0.3048

Epoch 4/5

60000/60000 [==============================] - 2s 34us/step - loss: 1.7077 - acc: 0.3194

Epoch 5/5

60000/60000 [==============================] - 2s 35us/step - loss: 1.6881 - acc: 0.3269

10000/10000 [==============================] - 0s 25us/step

[1.6838062465667725, 0.3282]

**For hidden node = 10**

Epoch 1/5

60000/60000 [==============================] - 3s 42us/step - loss: 0.4974 - acc: 0.8581

Epoch 2/5

60000/60000 [==============================] - 2s 39us/step - loss: 0.2868 - acc: 0.9171

Epoch 3/5

60000/60000 [==============================] - 2s 39us/step - loss: 0.2569 - acc: 0.9255

Epoch 4/5

60000/60000 [==============================] - 2s 38us/step - loss: 0.2413 - acc: 0.9305

Epoch 5/5

60000/60000 [==============================] - 2s 39us/step - loss: 0.2309 - acc: 0.9335

10000/10000 [==============================] - 0s 30us/step

[0.2382672635987401, 0.931]

**For hidden node = 50**

Epoch 1/5

60000/60000 [==============================] - 3s 50us/step - loss: 0.3237 - acc: 0.9084

Epoch 2/5

60000/60000 [==============================] - 3s 46us/step - loss: 0.1619 - acc: 0.9543

Epoch 3/5

60000/60000 [==============================] - 3s 46us/step - loss: 0.1194 - acc: 0.9652

Epoch 4/5

60000/60000 [==============================] - 3s 46us/step - loss: 0.0952 - acc: 0.9714

Epoch 5/5

60000/60000 [==============================] - 3s 46us/step - loss: 0.0799 - acc: 0.9759

10000/10000 [==============================] - 0s 33us/step

[0.10235463647432626, 0.9694]

**For hidden node = 100**

Epoch 1/5

60000/60000 [==============================] - 5s 84us/step - loss: 0.2812 - acc: 0.9216

Epoch 2/5

60000/60000 [==============================] - 5s 79us/step - loss: 0.1276 - acc: 0.9621

Epoch 3/5

60000/60000 [==============================] - 5s 79us/step - loss: 0.0879 - acc: 0.9735

Epoch 4/5

60000/60000 [==============================] - 5s 81us/step - loss: 0.0655 - acc: 0.9797

Epoch 5/5

60000/60000 [==============================] - 5s 79us/step - loss: 0.0519 - acc: 0.9841

10000/10000 [==============================] - 0s 37us/step

[0.07331630471507088, 0.9765]

**Observation:**

The accuracy increases as we increase the number of hidden nodes.