```
Accuracy: 46.00%;
                                                 Val loss: 0.83;
Epoch 1 \Rightarrow
            loss: 0.72;
                                                                     Val Accuracy: 46.73%
                            Accuracy : 53.68%;
                                                 Val loss : 1.58;
Epoch 2 =>
            loss : 1.80;
                                                                     Val Accuracy: 47.45%
Epoch 3 \Rightarrow
                            Accuracy : 55.77%;
                                                 Val_loss : 0.91;
            loss: 0.76;
                                                                     Val_Accuracy : 71.27%
Epoch 4 \Rightarrow
            loss : 1.42;
                            Accuracy : 60.72%;
                                                 Val loss : 0.85;
                                                                     Val_Accuracy : 80.73%
Epoch 5 =>
            loss: 0.84;
                            Accuracy : 62.81%;
                                                 Val_loss : 0.77;
                                                                     Val_Accuracy: 75.82%
                                                 Val loss: 0.59;
Epoch 6 =>
            loss : 1.42;
                            Accuracy : 67.80%;
                                                                     Val_Accuracy: 80.91%
            loss: 1.88;
                            Accuracy: 72.39%;
                                                 Val_loss : 0.63;
                                                                     Val_Accuracy: 80.73%
Epoch 7 =>
Epoch 8 =>
            loss : 1.61;
                            Accuracy: 74.39%;
                                                 Val loss : 1.00;
                                                                     Val Accuracy: 83.27%
                            Accuracy: 76.48%;
                                                 Val_loss : 1.00;
Epoch 9 =>
            loss : 0.91;
                                                                     Val_Accuracy : 83.09%
Epoch 10 =>
             loss : 1.10;
                            Accuracy : 75.98%;
                                                  Val_loss : 0.54;
                                                                      Val_Accuracy: 83.64%
Epoch 11 =>
             loss: 0.89;
                            Accuracy : 79.11%;
                                                  Val_loss : 0.59;
                                                                      Val_Accuracy: 84.55%
                            Accuracy: 79.34%;
                                                  Val loss : 0.64;
                                                                      Val Accuracy: 86.00%
Epoch 12 =>
             loss : 1.80;
             loss: 1.90;
                            Accuracy: 82.06%;
                                                  Val_loss : 0.65;
                                                                      Val_Accuracy: 86.00%
Epoch 13 =>
                                                  Val_loss : 0.79;
Epoch 14 =>
             loss: 0.37;
                            Accuracy : 81.24%;
                                                                      Val_Accuracy : 86.18%
Epoch 15 =>
             loss : 0.99;
                            Accuracy : 82.11%;
                                                  Val_loss : 0.57;
                                                                      Val_Accuracy : 87.09%
Epoch 16 =>
             loss: 0.60;
                            Accuracy: 82.65%;
                                                  Val_loss : 0.76;
                                                                      Val_Accuracy : 86.00%
                                                  Val_loss : 0.43;
Epoch 17 =>
             loss: 0.55;
                            Accuracy : 82.24%;
                                                                      Val_Accuracy: 85.45%
Epoch 18 =>
                            Accuracy: 82.24%;
                                                  Val_loss : 0.82;
                                                                      Val_Accuracy: 85.27%
             loss : 1.15;
Epoch 19 =>
             loss : 1.20;
                            Accuracy: 83.65%;
                                                  Val loss : 0.53;
                                                                      Val Accuracy: 87.64%
Epoch 20 =>
             loss: 1.03;
                            Accuracy: 83.29%;
                                                  Val_loss : 0.72;
                                                                      Val_Accuracy: 89.09%
Epoch 21 =>
             loss : 1.04;
                            Accuracy : 85.10%;
                                                  Val_loss : 0.33;
                                                                      Val_Accuracy: 87.64%
Epoch 22 =>
             loss: 0.60;
                            Accuracy : 83.47%;
                                                  Val_loss : 0.59;
                                                                      Val_Accuracy : 88.18%
Epoch 23 =>
             loss: 0.32;
                            Accuracy: 84.65%;
                                                  Val_loss : 0.73;
                                                                      Val_Accuracy : 88.91%
                                                                      Val_Accuracy: 89.45%
                            Accuracy: 83.74%;
                                                  Val loss : 0.88;
Epoch 24 =>
             loss: 0.75;
Epoch 25 =>
             loss : 0.71;
                            Accuracy: 85.88%;
                                                  Val_loss : 0.47;
                                                                      Val_Accuracy : 88.91%
                                                  Val_loss : 0.52;
                                                                      Val_Accuracy: 87.09%
Epoch 26 =>
             loss : 1.06;
                             Accuracy : 85.83%;
Epoch 27 =>
             loss: 0.25;
                            Accuracy: 84.60%;
                                                  Val_loss : 0.72;
                                                                      Val_Accuracy: 89.82%
Epoch 28 =>
             loss : 1.11;
                            Accuracy : 86.01%;
                                                  Val_loss : 0.62;
                                                                      Val_Accuracy : 86.36%
                            Accuracy: 85.69%;
Epoch 29 =>
             loss: 0.22;
                                                  Val_loss : 0.42;
                                                                      Val_Accuracy: 88.00%
Epoch 30 =>
             loss: 0.30;
                            Accuracy : 85.51%;
                                                  Val loss : 0.42;
                                                                      Val Accuracy: 90.55%
Epoch 31 =>
             loss: 0.93;
                            Accuracy: 85.92%;
                                                  Val_loss : 0.41;
                                                                      Val_Accuracy: 86.91%
Epoch 32 =>
             loss: 0.93;
                            Accuracy : 86.06%;
                                                  Val_loss : 0.52;
                                                                      Val_Accuracy : 88.00%
             loss: 0.25;
Epoch 33 =>
                            Accuracy: 87.42%;
                                                  Val_loss : 0.35;
                                                                      Val_Accuracy: 88.36%
             loss: 0.17;
Epoch 34 =>
                            Accuracy : 85.10%;
                                                  Val_loss : 0.39;
                                                                      Val_Accuracy: 88.73%
                                                  Val_loss : 0.34;
Epoch 35 =>
             loss: 0.36;
                            Accuracy: 87.06%;
                                                                      Val_Accuracy: 89.45%
                            Accuracy: 88.47%;
Epoch 36 =>
             loss: 0.37;
                                                  Val_loss : 0.18;
                                                                      Val_Accuracy : 90.91%
                            Accuracy: 86.83%;
Epoch 37 =>
             loss: 0.36;
                                                  Val_loss : 0.30;
                                                                      Val_Accuracy: 89.82%
Epoch 38 =>
             loss : 0.61;
                            Accuracy: 87.65%;
                                                  Val_loss : 0.27;
                                                                      Val_Accuracy : 89.64%
Epoch 39 =>
             loss: 0.95;
                            Accuracy : 87.19%;
                                                  Val loss : 0.50;
                                                                      Val Accuracy : 92.18%
Epoch 40 =>
             loss: 0.54;
                            Accuracy: 88.10%;
                                                  Val_loss : 0.50;
                                                                      Val_Accuracy : 90.91%
                                                                      Val_Accuracy: 88.55%
Epoch 41 =>
             loss: 0.35;
                            Accuracy: 88.19%;
                                                  Val loss : 0.54;
                            Accuracy : 88.78%;
                                                  Val loss : 0.31;
                                                                      Val Accuracy: 91.27%
Epoch 42 =>
             loss: 0.80;
                                                  Val_loss : 0.55;
Epoch 43 =>
             loss: 0.65;
                            Accuracy: 87.74%;
                                                                      Val_Accuracy : 92.18%
Epoch 44 =>
             loss : 1.08;
                            Accuracy : 88.74%;
                                                  Val loss : 0.22;
                                                                      Val Accuracy : 90.73%
Epoch 45 =>
             loss : 0.02;
                            Accuracy : 88.83%;
                                                  Val_loss : 0.38;
                                                                      Val_Accuracy : 92.00%
                                                  Val_loss : 0.47;
Epoch 46 =>
             loss: 0.74;
                             Accuracy: 88.06%;
                                                                      Val_Accuracy : 91.82%
Epoch 47 =>
             loss: 0.73;
                            Accuracy: 88.15%;
                                                  Val loss : 0.72;
                                                                      Val Accuracy: 92.55%
Epoch 48 =>
             loss: 0.35;
                             Accuracy : 89.33%;
                                                  Val loss : 0.56;
                                                                      Val Accuracy : 90.73%
                                                                      Val_Accuracy : 91.27%
Epoch 49 =>
             loss: 0.36;
                            Accuracy: 88.33%;
                                                  Val_loss : 0.48;
Epoch 50 =>
             loss: 0.08;
                            Accuracy: 89.65%;
                                                  Val loss : 0.30;
                                                                      Val Accuracy : 90.91%
                                                                      Val_Accuracy : 92.18%
             loss: 0.75;
                            Accuracy: 89.87%;
Epoch 51 =>
                                                  Val_loss : 0.20;
Epoch 52 =>
             loss: 0.31;
                            Accuracy: 89.06%;
                                                  Val loss : 0.25;
                                                                      Val Accuracy: 92.91%
                                                  Val loss: 0.43;
Epoch 53 =>
             loss: 0.37;
                            Accuracy: 89.19%;
                                                                      Val Accuracy: 92.55%
Epoch 54 =>
             loss: 0.28;
                            Accuracy: 89.24%;
                                                  Val_loss : 0.28;
                                                                      Val Accuracy: 92.55%
Epoch 55 =>
                                                                      Val Accuracy: 91.09%
             loss : 0.60;
                            Accuracy : 89.10%;
                                                  Val loss : 0.22;
                            Accuracy : 90.24%;
                                                                      Val Accuracy: 93.64%
Epoch 56 =>
             loss: 0.26;
                                                  Val loss : 0.18;
                                                                      Val_Accuracy : 91.45%
Epoch 57 =>
             loss: 0.43;
                             Accuracy: 89.83%;
                                                  Val loss : 0.10;
                            Accuracy : 90.74%;
Epoch 58 =>
             loss: 0.44;
                                                  Val_loss : 0.29;
                                                                      Val_Accuracy : 94.55%
Epoch 59 =>
                                                                      Val_Accuracy : 94.36%
             loss : 0.37;
                             Accuracy : 91.05%;
                                                  Val_loss : 0.37;
Epoch 60 =>
             loss: 0.91;
                             Accuracy : 90.83%;
                                                  Val loss : 0.30;
                                                                      Val Accuracy: 92.73%
                                                  Val loss : 0.23;
Epoch 61 =>
             loss : 0.31;
                             Accuracy : 90.24%;
                                                                      Val Accuracy: 93.27%
```

```
Epoch 62 => loss : 0.15;
                            Accuracy : 89.83%;
                                                 Val loss : 0.18;
                                                                    Val Accuracy : 92.73%
Epoch 63 =>
            loss : 0.60;
                            Accuracy : 90.15%;
                                                 Val loss : 0.20;
                                                                    Val_Accuracy : 92.18%
            loss: 0.49;
                            Accuracy: 89.92%;
                                                 Val loss : 0.26;
                                                                    Val Accuracy: 92.91%
Epoch 64 =>
Epoch 65 => loss: 0.59;
                            Accuracy: 90.83%;
                                                 Val_loss : 0.20;
                                                                    Val_Accuracy : 92.18%
Epoch 66 => loss: 0.84;
                            Accuracy : 90.55%;
                                                 Val loss : 0.38;
                                                                    Val Accuracy: 93.09%
Epoch 67 => loss: 0.78;
                            Accuracy: 90.69%;
                                                 Val_loss : 0.28;
                                                                    Val_Accuracy: 93.09%
Epoch 68 => loss: 0.02;
                            Accuracy : 90.01%;
                                                 Val_loss : 0.24;
                                                                    Val_Accuracy : 91.64%
Epoch 69 => loss: 0.71;
                            Accuracy: 90.69%;
                                                 Val_loss : 0.27;
                                                                    Val_Accuracy : 92.91%
Epoch 70 => loss: 0.37;
                            Accuracy : 91.37%;
                                                 Val loss : 0.07;
                                                                    Val Accuracy: 92.55%
                            Accuracy : 90.28%;
Epoch 71 => loss : 0.31;
                                                 Val loss : 0.43;
                                                                    Val_Accuracy : 93.09%
                            Accuracy : 91.92%;
Epoch 72 => loss: 0.05;
                                                 Val_loss : 0.14;
                                                                    Val_Accuracy : 92.91%
Epoch 73 => loss: 0.34;
                            Accuracy : 90.19%;
                                                 Val_loss : 0.43;
                                                                    Val_Accuracy : 92.36%
Epoch 74 => loss: 0.22;
                            Accuracy : 90.78%;
                                                 Val_loss : 0.21;
                                                                    Val_Accuracy : 94.00%
Epoch 75 => loss: 0.60;
                            Accuracy : 91.83%;
                                                 Val_loss : 0.12;
                                                                    Val_Accuracy: 93.27%
Epoch 76 => loss: 0.33;
                            Accuracy : 91.37%;
                                                 Val_loss : 0.14;
                                                                    Val_Accuracy : 92.18%
                                                 Val loss : 0.22;
Epoch 77 => loss: 0.79;
                            Accuracy : 92.23%;
                                                                    Val Accuracy: 93.09%
Epoch 78 => loss: 0.07;
                            Accuracy : 92.42%;
                                                 Val_loss : 0.10;
                                                                    Val_Accuracy : 92.36%
Epoch 79 => loss: 0.69;
                            Accuracy : 92.10%;
                                                 Val_loss : 0.40;
                                                                    Val_Accuracy: 88.73%
Epoch 80 => loss: 0.02;
                            Accuracy : 91.42%;
                                                 Val_loss : 0.20;
                                                                    Val_Accuracy : 93.45%
```