```
Accuracy: 45.19%;
                                                 Val_loss : 1.03;
Epoch 1 \Rightarrow
            loss : 1.19;
                                                                     Val Accuracy : 51.27%
                            Accuracy : 50.09%;
                                                 Val loss : 1.66;
Epoch 2 =>
            loss : 1.17;
                                                                     Val Accuracy: 68.18%
Epoch 3 \Rightarrow
                            Accuracy : 53.77%;
                                                 Val_loss : 1.05;
            loss : 1.67;
                                                                     Val_Accuracy : 72.55%
                            Accuracy : 54.54%;
Epoch 4 \Rightarrow
            loss : 0.82;
                                                 Val_loss : 0.86;
                                                                     Val_Accuracy : 78.55%
Epoch 5 =>
            loss: 0.79;
                            Accuracy : 57.90%;
                                                 Val_loss : 1.04;
                                                                     Val_Accuracy: 77.82%
                                                 Val loss : 0.81;
                                                                     Val_Accuracy: 77.82%
Epoch 6 =>
            loss : 1.30;
                            Accuracy : 64.21%;
            loss : 1.31;
                                                 Val_loss : 1.04;
Epoch 7 =>
                            Accuracy : 66.26%;
                                                                     Val_Accuracy: 78.36%
Epoch 8 =>
            loss : 1.11;
                            Accuracy : 69.30%;
                                                 Val loss : 0.82;
                                                                     Val Accuracy: 79.45%
            loss : 0.91;
                            Accuracy : 70.98%;
                                                 Val_loss : 0.87;
                                                                     Val_Accuracy : 80.91%
Epoch 9 \Rightarrow
Epoch 10 =>
             loss: 0.88;
                             Accuracy : 73.61%;
                                                  Val_loss : 1.03;
                                                                      Val_Accuracy : 80.91%
Epoch 11 =>
             loss: 0.52;
                             Accuracy: 75.89%;
                                                  Val_loss : 0.71;
                                                                      Val_Accuracy : 80.36%
                             Accuracy: 75.98%;
                                                  Val loss : 0.64;
                                                                      Val Accuracy: 81.64%
Epoch 12 =>
             loss: 0.50;
                             Accuracy : 76.57%;
             loss: 0.52;
                                                  Val_loss : 0.68;
                                                                      Val_Accuracy: 79.82%
Epoch 13 =>
Epoch 14 =>
             loss: 0.93;
                             Accuracy : 79.47%;
                                                  Val_loss : 0.55;
                                                                      Val_Accuracy : 83.64%
Epoch 15 =>
             loss : 0.52;
                             Accuracy : 80.29%;
                                                  Val_loss : 0.52;
                                                                      Val_Accuracy : 85.09%
Epoch 16 =>
             loss: 0.89;
                             Accuracy: 80.93%;
                                                  Val_loss : 0.60;
                                                                      Val_Accuracy : 87.27%
                                                  Val_loss : 0.46;
Epoch 17 =>
             loss : 1.27;
                             Accuracy : 80.34%;
                                                                      Val_Accuracy: 84.36%
                             Accuracy: 83.02%;
                                                  Val_loss : 0.26;
                                                                      Val_Accuracy: 87.27%
Epoch 18 =>
             loss: 0.73;
Epoch 19 =>
             loss : 1.33;
                             Accuracy : 81.15%;
                                                  Val loss : 0.57;
                                                                      Val Accuracy: 87.64%
Epoch 20 =>
             loss: 0.26;
                             Accuracy: 82.70%;
                                                  Val_loss : 0.30;
                                                                      Val_Accuracy: 87.45%
Epoch 21 =>
             loss : 1.22;
                             Accuracy : 83.11%;
                                                  Val_loss : 0.35;
                                                                      Val_Accuracy : 88.18%
Epoch 22 =>
             loss: 0.20;
                             Accuracy: 83.65%;
                                                  Val_loss : 0.36;
                                                                      Val_Accuracy : 88.18%
Epoch 23 =>
             loss: 0.82;
                             Accuracy: 83.65%;
                                                  Val_loss : 0.16;
                                                                      Val_Accuracy: 87.82%
                             Accuracy: 84.38%;
                                                  Val loss : 0.28;
                                                                      Val_Accuracy: 88.00%
Epoch 24 =>
             loss: 0.19;
Epoch 25 =>
             loss: 0.98;
                             Accuracy : 84.60%;
                                                  Val_loss : 0.28;
                                                                      Val_Accuracy: 88.36%
                                                                      Val_Accuracy: 89.45%
Epoch 26 =>
             loss : 0.40;
                             Accuracy : 84.24%;
                                                  Val_loss : 0.48;
Epoch 27 =>
             loss: 0.28;
                             Accuracy: 83.97%;
                                                  Val_loss : 0.26;
                                                                      Val_Accuracy : 88.00%
Epoch 28 =>
             loss: 0.78;
                             Accuracy: 84.74%;
                                                  Val_loss : 0.34;
                                                                      Val_Accuracy : 87.27%
                             Accuracy : 83.61%;
Epoch 29 =>
             loss : 1.43;
                                                  Val_loss : 0.52;
                                                                      Val_Accuracy : 91.09%
Epoch 30 =>
             loss: 0.25;
                             Accuracy : 85.51%;
                                                  Val loss : 0.29;
                                                                      Val Accuracy : 90.18%
Epoch 31 =>
                             Accuracy: 85.92%;
                                                  Val_loss : 0.11;
                                                                      Val_Accuracy: 87.82%
             loss: 0.22;
Epoch 32 =>
             loss : 1.13;
                             Accuracy : 83.51%;
                                                  Val_loss : 0.21;
                                                                      Val_Accuracy : 91.27%
Epoch 33 =>
             loss : 1.24;
                             Accuracy: 86.29%;
                                                  Val_loss : 0.19;
                                                                      Val_Accuracy : 90.18%
                                                                      Val_Accuracy : 91.27%
Epoch 34 =>
             loss: 0.74;
                             Accuracy: 85.33%;
                                                  Val_loss : 0.28;
                                                  Val_loss : 0.22;
Epoch 35 =>
             loss: 0.27;
                             Accuracy: 86.51%;
                                                                      Val_Accuracy : 91.64%
             loss: 1.00;
                                                  Val_loss : 0.38;
                                                                      Val_Accuracy : 90.55%
Epoch 36 =>
                             Accuracy: 85.06%;
Epoch 37 =>
             loss: 0.27;
                             Accuracy : 86.06%;
                                                  Val_loss : 0.11;
                                                                      Val_Accuracy : 91.09%
Epoch 38 =>
             loss : 1.05;
                             Accuracy: 87.24%;
                                                  Val_loss : 0.21;
                                                                      Val_Accuracy : 91.27%
Epoch 39 =>
             loss : 1.23;
                             Accuracy: 86.97%;
                                                  Val loss : 0.18;
                                                                      Val Accuracy : 91.64%
Epoch 40 =>
             loss: 0.47;
                             Accuracy: 86.60%;
                                                  Val_loss : 0.20;
                                                                      Val_Accuracy : 92.36%
                                                                      Val_Accuracy: 87.82%
Epoch 41 =>
             loss: 0.31;
                             Accuracy: 87.60%;
                                                  Val loss : 0.40;
                                                  Val loss: 0.46;
                                                                      Val Accuracy: 91.64%
Epoch 42 =>
             loss: 0.39;
                             Accuracy: 86.69%;
                                                  Val_loss : 0.38;
Epoch 43 =>
             loss: 0.66;
                             Accuracy: 87.10%;
                                                                      Val_Accuracy : 93.27%
Epoch 44 =>
             loss : 0.15;
                             Accuracy : 88.24%;
                                                  Val loss : 0.22;
                                                                      Val Accuracy : 92.91%
Epoch 45 =>
             loss : 1.32;
                             Accuracy : 87.38%;
                                                  Val_loss : 0.31;
                                                                      Val_Accuracy : 93.45%
                                                  Val_loss : 0.18;
Epoch 46 =>
             loss: 0.49;
                             Accuracy: 86.56%;
                                                                      Val_Accuracy: 93.64%
Epoch 47 =>
             loss : 1.17;
                             Accuracy: 87.92%;
                                                  Val loss : 0.21;
                                                                      Val Accuracy: 93.09%
Epoch 48 =>
             loss : 0.36;
                             Accuracy: 88.60%;
                                                  Val loss : 0.20;
                                                                      Val Accuracy: 89.45%
                                                                      Val_Accuracy : 93.27%
Epoch 49 =>
             loss: 0.58;
                             Accuracy: 87.47%;
                                                  Val_loss : 0.39;
Epoch 50 =>
             loss: 0.52;
                             Accuracy : 88.15%;
                                                  Val loss : 0.36;
                                                                      Val Accuracy : 91.45%
                                                                      Val_Accuracy : 93.09%
                             Accuracy: 88.74%;
Epoch 51 =>
             loss : 0.44;
                                                  Val_loss : 0.24;
Epoch 52 =>
             loss: 0.62;
                             Accuracy: 89.37%;
                                                  Val loss : 0.37;
                                                                      Val Accuracy: 93.45%
                                                  Val loss: 0.26;
Epoch 53 =>
             loss: 0.28;
                             Accuracy: 89.37%;
                                                                      Val Accuracy: 91.82%
Epoch 54 =>
             loss: 0.02;
                             Accuracy: 88.87%;
                                                  Val_loss : 0.17;
                                                                      Val Accuracy: 94.00%
Epoch 55 =>
                             Accuracy : 90.55%;
                                                                      Val Accuracy: 93.45%
             loss: 0.56;
                                                  Val loss : 0.25;
                             Accuracy: 89.10%;
Epoch 56 =>
             loss : 0.31;
                                                  Val_loss : 0.27;
                                                                      Val Accuracy : 94.18%
                                                                      Val_Accuracy : 93.82%
Epoch 57 =>
             loss: 0.50;
                             Accuracy: 89.96%;
                                                  Val loss : 0.31;
Epoch 58 =>
             loss: 0.19;
                             Accuracy: 89.46%;
                                                  Val_loss : 0.25;
                                                                      Val_Accuracy : 92.00%
Epoch 59 =>
             loss : 0.17;
                             Accuracy : 90.46%;
                                                  Val_loss : 0.17;
                                                                      Val_Accuracy : 93.64%
Epoch 60 =>
             loss: 0.63;
                             Accuracy: 89.96%;
                                                  Val loss : 0.20;
                                                                      Val Accuracy: 94.18%
                                                  Val loss : 0.32;
Epoch 61 =>
             loss: 0.48;
                             Accuracy : 90.55%;
                                                                      Val Accuracy : 92.73%
```

```
Epoch 62 => loss : 0.04;
                            Accuracy : 91.19%;
                                                 Val loss : 0.13;
                                                                    Val Accuracy : 94.00%
Epoch 63 =>
            loss: 0.45;
                            Accuracy : 90.60%;
                                                 Val loss : 0.24;
                                                                    Val_Accuracy : 94.55%
            loss: 0.72;
                            Accuracy: 89.37%;
                                                 Val loss : 0.44;
                                                                    Val Accuracy: 92.91%
Epoch 64 =>
Epoch 65 => loss: 0.04;
                            Accuracy: 89.78%;
                                                 Val_loss : 0.18;
                                                                    Val_Accuracy : 94.55%
Epoch 66 => loss: 0.35;
                            Accuracy : 91.10%;
                                                 Val loss : 0.20;
                                                                    Val Accuracy: 93.64%
Epoch 67 => loss: 0.24;
                            Accuracy : 90.01%;
                                                 Val_loss : 0.21;
                                                                    Val_Accuracy: 93.82%
Epoch 68 => loss: 0.04;
                            Accuracy : 90.78%;
                                                 Val_loss : 0.27;
                                                                    Val_Accuracy : 94.36%
Epoch 69 => loss : 1.01;
                            Accuracy : 90.51%;
                                                 Val_loss : 0.32;
                                                                    Val_Accuracy: 93.64%
Epoch 70 => loss: 0.97;
                            Accuracy : 91.51%;
                                                 Val loss : 0.12;
                                                                    Val Accuracy: 92.55%
                            Accuracy : 91.37%;
Epoch 71 => loss: 0.47;
                                                 Val loss : 0.23;
                                                                    Val_Accuracy: 93.64%
                            Accuracy : 92.33%;
Epoch 72 => loss: 0.35;
                                                 Val_loss : 0.03;
                                                                    Val_Accuracy : 93.64%
Epoch 73 => loss: 0.20;
                            Accuracy : 90.92%;
                                                 Val_loss : 0.03;
                                                                    Val_Accuracy : 95.27%
Epoch 74 => loss: 0.70;
                            Accuracy : 90.64%;
                                                 Val_loss : 0.14;
                                                                    Val_Accuracy : 93.09%
Epoch 75 => loss: 0.80;
                            Accuracy : 90.19%;
                                                 Val_loss : 0.07;
                                                                    Val_Accuracy: 94.00%
Epoch 76 => loss: 0.62;
                            Accuracy : 91.60%;
                                                 Val_loss : 0.03;
                                                                    Val_Accuracy: 93.82%
Epoch 77 => loss : 1.36;
                            Accuracy : 90.78%;
                                                 Val loss : 0.15;
                                                                    Val Accuracy: 94.55%
Epoch 78 => loss: 0.99;
                            Accuracy : 90.42%;
                                                 Val_loss : 0.19;
                                                                    Val_Accuracy: 95.09%
Epoch 79 => loss : 1.12;
                            Accuracy : 92.28%;
                                                 Val_loss : 0.07;
                                                                    Val_Accuracy : 93.82%
Epoch 80 => loss: 0.37;
                            Accuracy : 91.46%;
                                                 Val_loss : 0.14;
                                                                    Val_Accuracy : 94.00%
```