

Algorithm: Adam Batch size: 2000 learning rate: 0.005 Epochs: 20

Epoch 1:

Accuracy on batch 1: 0.101 [202/2000] (progress of the epoch: 0.03)
Accuracy on batch 2: 0.156 [313/2000] (progress of the epoch: 0.07)
Accuracy on batch 3: 0.186 [372/2000] (progress of the epoch: 0.10)
Accuracy on batch 4: 0.471 [941/2000] (progress of the epoch: 0.13)
Accuracy on batch 5: 0.505 [1010/2000] (progress of the epoch: 0.17)
Accuracy on batch 6: 0.404 [809/2000] (progress of the epoch: 0.20)
Accuracy on batch 7: 0.380 [760/2000] (progress of the epoch: 0.23)
Accuracy on batch 8: 0.478 [956/2000] (progress of the epoch: 0.27)
Accuracy on batch 9: 0.492 [984/2000] (progress of the epoch: 0.30)
Accuracy on batch 10: 0.514 [1029/2000] (progress of the epoch: 0.33)
Accuracy on batch 11: 0.639 [1277/2000] (progress of the epoch: 0.37)
Accuracy on batch 12: 0.653 [1305/2000] (progress of the epoch: 0.40)
Accuracy on batch 13: 0.669 [1339/2000] (progress of the epoch: 0.43)
Accuracy on batch 14: 0.659 [1319/2000] (progress of the epoch: 0.47)
Accuracy on batch 15: 0.700 [1399/2000] (progress of the epoch: 0.50)
Accuracy on batch 16: 0.734 [1469/2000] (progress of the epoch: 0.53)
Accuracy on batch 17: 0.734 [1468/2000] (progress of the epoch: 0.57)
Accuracy on batch 18: 0.762 [1524/2000] (progress of the epoch: 0.60)
Accuracy on batch 19: 0.775 [1551/2000] (progress of the epoch: 0.63)
Accuracy on batch 20: 0.770 [1540/2000] (progress of the epoch: 0.67)
Accuracy on batch 21: 0.802 [1604/2000] (progress of the epoch: 0.70)
Accuracy on batch 22: 0.771 [1543/2000] (progress of the epoch: 0.73)
Accuracy on batch 23: 0.807 [1615/2000] (progress of the epoch: 0.77)
Accuracy on batch 24: 0.781 [1562/2000] (progress of the epoch: 0.80)
Accuracy on batch 25: 0.786 [1573/2000] (progress of the epoch: 0.83)
Accuracy on batch 26: 0.788 [1577/2000] (progress of the epoch: 0.87)
Accuracy on batch 27: 0.802 [1605/2000] (progress of the epoch: 0.90)
Accuracy on batch 28: 0.810 [1620/2000] (progress of the epoch: 0.93)
Accuracy on batch 29: 0.825 [1649/2000] (progress of the epoch: 0.97)
Accuracy on batch 30: 0.843 [1686/2000] (progress of the epoch: 1.00)

Accuracy on test data: 0.851 [8514/10000]

Epoch 2:

Accuracy on batch 1: 0.865 [1730/2000] (progress of the epoch: 0.03)
Accuracy on batch 2: 0.857 [1714/2000] (progress of the epoch: 0.07)
Accuracy on batch 3: 0.859 [1718/2000] (progress of the epoch: 0.10)
Accuracy on batch 4: 0.850 [1700/2000] (progress of the epoch: 0.13)
Accuracy on batch 5: 0.856 [1711/2000] (progress of the epoch: 0.17)
Accuracy on batch 6: 0.826 [1651/2000] (progress of the epoch: 0.20)
Accuracy on batch 7: 0.843 [1685/2000] (progress of the epoch: 0.23)
Accuracy on batch 8: 0.865 [1730/2000] (progress of the epoch: 0.27)
Accuracy on batch 9: 0.878 [1756/2000] (progress of the epoch: 0.30)
Accuracy on batch 10: 0.872 [1744/2000] (progress of the epoch: 0.33)

Accuracy on batch 11: 0.888 [1777/2000] (progress of the epoch: 0.37)
Accuracy on batch 12: 0.868 [1736/2000] (progress of the epoch: 0.40)
Accuracy on batch 13: 0.877 [1755/2000] (progress of the epoch: 0.43)
Accuracy on batch 14: 0.886 [1772/2000] (progress of the epoch: 0.47)
Accuracy on batch 15: 0.896 [1792/2000] (progress of the epoch: 0.50)
Accuracy on batch 16: 0.895 [1790/2000] (progress of the epoch: 0.53)
Accuracy on batch 17: 0.896 [1793/2000] (progress of the epoch: 0.57)
Accuracy on batch 18: 0.898 [1797/2000] (progress of the epoch: 0.60)
Accuracy on batch 19: 0.906 [1812/2000] (progress of the epoch: 0.63)
Accuracy on batch 20: 0.909 [1819/2000] (progress of the epoch: 0.67)
Accuracy on batch 21: 0.915 [1831/2000] (progress of the epoch: 0.70)
Accuracy on batch 22: 0.911 [1822/2000] (progress of the epoch: 0.73)
Accuracy on batch 23: 0.912 [1825/2000] (progress of the epoch: 0.77)
Accuracy on batch 24: 0.915 [1831/2000] (progress of the epoch: 0.80)
Accuracy on batch 25: 0.913 [1827/2000] (progress of the epoch: 0.83)
Accuracy on batch 26: 0.914 [1828/2000] (progress of the epoch: 0.87)
Accuracy on batch 27: 0.919 [1838/2000] (progress of the epoch: 0.90)
Accuracy on batch 28: 0.931 [1862/2000] (progress of the epoch: 0.93)
Accuracy on batch 29: 0.918 [1837/2000] (progress of the epoch: 0.97)
Accuracy on batch 30: 0.925 [1851/2000] (progress of the epoch: 1.00)

Accuracy on test data: 0.935 [9348/10000]

Epoch 3:

Accuracy on batch 1: 0.926 [1852/2000] (progress of the epoch: 0.03)
Accuracy on batch 2: 0.930 [1860/2000] (progress of the epoch: 0.07)
Accuracy on batch 3: 0.927 [1855/2000] (progress of the epoch: 0.10)
Accuracy on batch 4: 0.934 [1869/2000] (progress of the epoch: 0.13)
Accuracy on batch 5: 0.934 [1868/2000] (progress of the epoch: 0.17)
Accuracy on batch 6: 0.938 [1875/2000] (progress of the epoch: 0.20)
Accuracy on batch 7: 0.939 [1878/2000] (progress of the epoch: 0.23)
Accuracy on batch 8: 0.931 [1863/2000] (progress of the epoch: 0.27)
Accuracy on batch 9: 0.946 [1891/2000] (progress of the epoch: 0.30)
Accuracy on batch 10: 0.932 [1865/2000] (progress of the epoch: 0.33)
Accuracy on batch 11: 0.940 [1880/2000] (progress of the epoch: 0.37)
Accuracy on batch 12: 0.943 [1885/2000] (progress of the epoch: 0.40)
Accuracy on batch 13: 0.937 [1874/2000] (progress of the epoch: 0.43)
Accuracy on batch 14: 0.947 [1893/2000] (progress of the epoch: 0.47)
Accuracy on batch 15: 0.946 [1891/2000] (progress of the epoch: 0.50)
Accuracy on batch 16: 0.946 [1891/2000] (progress of the epoch: 0.53)
Accuracy on batch 17: 0.953 [1906/2000] (progress of the epoch: 0.57)
Accuracy on batch 18: 0.944 [1888/2000] (progress of the epoch: 0.60)
Accuracy on batch 19: 0.948 [1896/2000] (progress of the epoch: 0.63)
Accuracy on batch 20: 0.952 [1903/2000] (progress of the epoch: 0.67)
Accuracy on batch 21: 0.947 [1894/2000] (progress of the epoch: 0.70)
Accuracy on batch 22: 0.950 [1899/2000] (progress of the epoch: 0.73)

Accuracy on batch 23: 0.946 [1892/2000] (progress of the epoch: 0.77)
Accuracy on batch 24: 0.946 [1892/2000] (progress of the epoch: 0.80)
Accuracy on batch 25: 0.939 [1877/2000] (progress of the epoch: 0.83)
Accuracy on batch 26: 0.949 [1898/2000] (progress of the epoch: 0.87)
Accuracy on batch 27: 0.954 [1907/2000] (progress of the epoch: 0.90)
Accuracy on batch 28: 0.956 [1912/2000] (progress of the epoch: 0.93)
Accuracy on batch 29: 0.960 [1920/2000] (progress of the epoch: 0.97)
Accuracy on batch 30: 0.952 [1904/2000] (progress of the epoch: 1.00)

Accuracy on test data: 0.960 [9602/10000]

Epoch 4:

Accuracy on batch 1: 0.951 [1902/2000] (progress of the epoch: 0.03)
Accuracy on batch 2: 0.948 [1896/2000] (progress of the epoch: 0.07)
Accuracy on batch 3: 0.957 [1913/2000] (progress of the epoch: 0.10)
Accuracy on batch 4: 0.965 [1929/2000] (progress of the epoch: 0.13)
Accuracy on batch 5: 0.964 [1928/2000] (progress of the epoch: 0.17)
Accuracy on batch 6: 0.951 [1902/2000] (progress of the epoch: 0.20)
Accuracy on batch 7: 0.956 [1911/2000] (progress of the epoch: 0.23)
Accuracy on batch 8: 0.961 [1921/2000] (progress of the epoch: 0.27)
Accuracy on batch 9: 0.960 [1920/2000] (progress of the epoch: 0.30)
Accuracy on batch 10: 0.958 [1915/2000] (progress of the epoch: 0.33)
Accuracy on batch 11: 0.968 [1935/2000] (progress of the epoch: 0.37)
Accuracy on batch 12: 0.959 [1917/2000] (progress of the epoch: 0.40)
Accuracy on batch 13: 0.962 [1924/2000] (progress of the epoch: 0.43)
Accuracy on batch 14: 0.960 [1920/2000] (progress of the epoch: 0.47)
Accuracy on batch 15: 0.967 [1933/2000] (progress of the epoch: 0.50)
Accuracy on batch 16: 0.959 [1918/2000] (progress of the epoch: 0.53)
Accuracy on batch 17: 0.955 [1910/2000] (progress of the epoch: 0.57)
Accuracy on batch 18: 0.958 [1916/2000] (progress of the epoch: 0.60)
Accuracy on batch 19: 0.963 [1926/2000] (progress of the epoch: 0.63)
Accuracy on batch 20: 0.965 [1930/2000] (progress of the epoch: 0.67)
Accuracy on batch 21: 0.964 [1927/2000] (progress of the epoch: 0.70)
Accuracy on batch 22: 0.975 [1949/2000] (progress of the epoch: 0.73)
Accuracy on batch 23: 0.960 [1919/2000] (progress of the epoch: 0.77)
Accuracy on batch 24: 0.965 [1929/2000] (progress of the epoch: 0.80)
Accuracy on batch 25: 0.962 [1923/2000] (progress of the epoch: 0.83)
Accuracy on batch 26: 0.963 [1925/2000] (progress of the epoch: 0.87)
Accuracy on batch 27: 0.967 [1934/2000] (progress of the epoch: 0.90)
Accuracy on batch 28: 0.968 [1935/2000] (progress of the epoch: 0.93)
Accuracy on batch 29: 0.968 [1935/2000] (progress of the epoch: 0.97)
Accuracy on batch 30: 0.971 [1941/2000] (progress of the epoch: 1.00)

Accuracy on test data: 0.971 [9707/10000]

Epoch 5:

Accuracy on batch 1: 0.972 [1943/2000] (progress of the epoch: 0.03)
Accuracy on batch 2: 0.964 [1927/2000] (progress of the epoch: 0.07)

Accuracy on batch 3: 0.965 [1930/2000] (progress of the epoch: 0.10)
Accuracy on batch 4: 0.968 [1935/2000] (progress of the epoch: 0.13)
Accuracy on batch 5: 0.964 [1927/2000] (progress of the epoch: 0.17)
Accuracy on batch 6: 0.968 [1935/2000] (progress of the epoch: 0.20)
Accuracy on batch 7: 0.963 [1926/2000] (progress of the epoch: 0.23)
Accuracy on batch 8: 0.959 [1918/2000] (progress of the epoch: 0.27)
Accuracy on batch 9: 0.964 [1928/2000] (progress of the epoch: 0.30)
Accuracy on batch 10: 0.972 [1943/2000] (progress of the epoch: 0.33)
Accuracy on batch 11: 0.973 [1945/2000] (progress of the epoch: 0.37)
Accuracy on batch 12: 0.971 [1941/2000] (progress of the epoch: 0.40)
Accuracy on batch 13: 0.975 [1950/2000] (progress of the epoch: 0.43)
Accuracy on batch 14: 0.978 [1956/2000] (progress of the epoch: 0.47)
Accuracy on batch 15: 0.967 [1934/2000] (progress of the epoch: 0.50)
Accuracy on batch 16: 0.966 [1931/2000] (progress of the epoch: 0.53)
Accuracy on batch 17: 0.974 [1948/2000] (progress of the epoch: 0.57)
Accuracy on batch 18: 0.972 [1944/2000] (progress of the epoch: 0.60)
Accuracy on batch 19: 0.973 [1945/2000] (progress of the epoch: 0.63)
Accuracy on batch 20: 0.969 [1937/2000] (progress of the epoch: 0.67)
Accuracy on batch 21: 0.975 [1949/2000] (progress of the epoch: 0.70)
Accuracy on batch 22: 0.973 [1945/2000] (progress of the epoch: 0.73)
Accuracy on batch 23: 0.969 [1938/2000] (progress of the epoch: 0.77)
Accuracy on batch 24: 0.971 [1942/2000] (progress of the epoch: 0.80)
Accuracy on batch 25: 0.970 [1940/2000] (progress of the epoch: 0.83)
Accuracy on batch 26: 0.976 [1952/2000] (progress of the epoch: 0.87)
Accuracy on batch 27: 0.977 [1954/2000] (progress of the epoch: 0.90)
Accuracy on batch 28: 0.972 [1944/2000] (progress of the epoch: 0.93)
Accuracy on batch 29: 0.975 [1950/2000] (progress of the epoch: 0.97)
Accuracy on batch 30: 0.976 [1952/2000] (progress of the epoch: 1.00)

Accuracy on test data: 0.977 [9768/10000]

Epoch 6:

Accuracy on batch 1: 0.971 [1941/2000] (progress of the epoch: 0.03)
Accuracy on batch 2: 0.977 [1954/2000] (progress of the epoch: 0.07)
Accuracy on batch 3: 0.969 [1938/2000] (progress of the epoch: 0.10)
Accuracy on batch 4: 0.978 [1955/2000] (progress of the epoch: 0.13)
Accuracy on batch 5: 0.973 [1945/2000] (progress of the epoch: 0.17)
Accuracy on batch 6: 0.974 [1947/2000] (progress of the epoch: 0.20)
Accuracy on batch 7: 0.977 [1954/2000] (progress of the epoch: 0.23)
Accuracy on batch 8: 0.974 [1947/2000] (progress of the epoch: 0.27)
Accuracy on batch 9: 0.973 [1946/2000] (progress of the epoch: 0.30)
Accuracy on batch 10: 0.972 [1943/2000] (progress of the epoch: 0.33)
Accuracy on batch 11: 0.980 [1960/2000] (progress of the epoch: 0.37)
Accuracy on batch 12: 0.975 [1949/2000] (progress of the epoch: 0.40)
Accuracy on batch 13: 0.978 [1956/2000] (progress of the epoch: 0.43)
Accuracy on batch 14: 0.978 [1955/2000] (progress of the epoch: 0.47)

Accuracy on batch 15: 0.973 [1945/2000] (progress of the epoch: 0.50)
Accuracy on batch 16: 0.975 [1950/2000] (progress of the epoch: 0.53)
Accuracy on batch 17: 0.976 [1951/2000] (progress of the epoch: 0.57)
Accuracy on batch 18: 0.972 [1943/2000] (progress of the epoch: 0.60)
Accuracy on batch 19: 0.977 [1954/2000] (progress of the epoch: 0.63)
Accuracy on batch 20: 0.978 [1956/2000] (progress of the epoch: 0.67)
Accuracy on batch 21: 0.969 [1937/2000] (progress of the epoch: 0.70)
Accuracy on batch 22: 0.976 [1951/2000] (progress of the epoch: 0.73)
Accuracy on batch 23: 0.977 [1953/2000] (progress of the epoch: 0.77)
Accuracy on batch 24: 0.973 [1945/2000] (progress of the epoch: 0.80)
Accuracy on batch 25: 0.976 [1952/2000] (progress of the epoch: 0.83)
Accuracy on batch 26: 0.976 [1951/2000] (progress of the epoch: 0.87)
Accuracy on batch 27: 0.968 [1936/2000] (progress of the epoch: 0.90)
Accuracy on batch 28: 0.971 [1942/2000] (progress of the epoch: 0.93)
Accuracy on batch 29: 0.974 [1948/2000] (progress of the epoch: 0.97)
Accuracy on batch 30: 0.978 [1956/2000] (progress of the epoch: 1.00)

Accuracy on test data: 0.971 [9714/10000]

Epoch 7:

Accuracy on batch 1: 0.968 [1936/2000] (progress of the epoch: 0.03)
Accuracy on batch 2: 0.981 [1961/2000] (progress of the epoch: 0.07)
Accuracy on batch 3: 0.974 [1947/2000] (progress of the epoch: 0.10)
Accuracy on batch 4: 0.969 [1938/2000] (progress of the epoch: 0.13)
Accuracy on batch 5: 0.979 [1958/2000] (progress of the epoch: 0.17)
Accuracy on batch 6: 0.979 [1957/2000] (progress of the epoch: 0.20)
Accuracy on batch 7: 0.981 [1961/2000] (progress of the epoch: 0.23)
Accuracy on batch 8: 0.980 [1960/2000] (progress of the epoch: 0.27)
Accuracy on batch 9: 0.980 [1959/2000] (progress of the epoch: 0.30)
Accuracy on batch 10: 0.975 [1950/2000] (progress of the epoch: 0.33)
Accuracy on batch 11: 0.976 [1952/2000] (progress of the epoch: 0.37)
Accuracy on batch 12: 0.978 [1955/2000] (progress of the epoch: 0.40)
Accuracy on batch 13: 0.975 [1950/2000] (progress of the epoch: 0.43)
Accuracy on batch 14: 0.971 [1942/2000] (progress of the epoch: 0.47)
Accuracy on batch 15: 0.976 [1951/2000] (progress of the epoch: 0.50)
Accuracy on batch 16: 0.977 [1953/2000] (progress of the epoch: 0.53)
Accuracy on batch 17: 0.980 [1959/2000] (progress of the epoch: 0.57)
Accuracy on batch 18: 0.980 [1960/2000] (progress of the epoch: 0.60)
Accuracy on batch 19: 0.971 [1941/2000] (progress of the epoch: 0.63)
Accuracy on batch 20: 0.978 [1956/2000] (progress of the epoch: 0.67)
Accuracy on batch 21: 0.975 [1950/2000] (progress of the epoch: 0.70)
Accuracy on batch 22: 0.977 [1953/2000] (progress of the epoch: 0.73)
Accuracy on batch 23: 0.977 [1954/2000] (progress of the epoch: 0.77)
Accuracy on batch 24: 0.980 [1959/2000] (progress of the epoch: 0.80)
Accuracy on batch 25: 0.976 [1952/2000] (progress of the epoch: 0.83)
Accuracy on batch 26: 0.981 [1962/2000] (progress of the epoch: 0.87)

Accuracy on batch 27: 0.972 [1944/2000] (progress of the epoch: 0.90)
Accuracy on batch 28: 0.986 [1972/2000] (progress of the epoch: 0.93)
Accuracy on batch 29: 0.976 [1951/2000] (progress of the epoch: 0.97)
Accuracy on batch 30: 0.980 [1959/2000] (progress of the epoch: 1.00)

Accuracy on test data: 0.981 [9805/10000]

Epoch 8:

Accuracy on batch 1: 0.984 [1968/2000] (progress of the epoch: 0.03)
Accuracy on batch 2: 0.976 [1951/2000] (progress of the epoch: 0.07)
Accuracy on batch 3: 0.981 [1962/2000] (progress of the epoch: 0.10)
Accuracy on batch 4: 0.981 [1962/2000] (progress of the epoch: 0.13)
Accuracy on batch 5: 0.986 [1971/2000] (progress of the epoch: 0.17)
Accuracy on batch 6: 0.981 [1962/2000] (progress of the epoch: 0.20)
Accuracy on batch 7: 0.975 [1950/2000] (progress of the epoch: 0.23)
Accuracy on batch 8: 0.980 [1960/2000] (progress of the epoch: 0.27)
Accuracy on batch 9: 0.980 [1959/2000] (progress of the epoch: 0.30)
Accuracy on batch 10: 0.981 [1962/2000] (progress of the epoch: 0.33)
Accuracy on batch 11: 0.978 [1956/2000] (progress of the epoch: 0.37)
Accuracy on batch 12: 0.976 [1952/2000] (progress of the epoch: 0.40)
Accuracy on batch 13: 0.980 [1959/2000] (progress of the epoch: 0.43)
Accuracy on batch 14: 0.979 [1958/2000] (progress of the epoch: 0.47)
Accuracy on batch 15: 0.980 [1960/2000] (progress of the epoch: 0.50)
Accuracy on batch 16: 0.985 [1969/2000] (progress of the epoch: 0.53)
Accuracy on batch 17: 0.982 [1964/2000] (progress of the epoch: 0.57)
Accuracy on batch 18: 0.974 [1948/2000] (progress of the epoch: 0.60)
Accuracy on batch 19: 0.982 [1964/2000] (progress of the epoch: 0.63)
Accuracy on batch 20: 0.982 [1964/2000] (progress of the epoch: 0.67)
Accuracy on batch 21: 0.979 [1958/2000] (progress of the epoch: 0.70)
Accuracy on batch 22: 0.979 [1957/2000] (progress of the epoch: 0.73)
Accuracy on batch 23: 0.974 [1947/2000] (progress of the epoch: 0.77)
Accuracy on batch 24: 0.975 [1950/2000] (progress of the epoch: 0.80)
Accuracy on batch 25: 0.982 [1963/2000] (progress of the epoch: 0.83)
Accuracy on batch 26: 0.979 [1957/2000] (progress of the epoch: 0.87)
Accuracy on batch 27: 0.978 [1955/2000] (progress of the epoch: 0.90)
Accuracy on batch 28: 0.977 [1954/2000] (progress of the epoch: 0.93)
Accuracy on batch 29: 0.981 [1961/2000] (progress of the epoch: 0.97)
Accuracy on batch 30: 0.983 [1965/2000] (progress of the epoch: 1.00)

Accuracy on test data: 0.983 [9829/10000]

Epoch 9:

Accuracy on batch 1: 0.984 [1967/2000] (progress of the epoch: 0.03)
Accuracy on batch 2: 0.979 [1958/2000] (progress of the epoch: 0.07)
Accuracy on batch 3: 0.980 [1959/2000] (progress of the epoch: 0.10)
Accuracy on batch 4: 0.979 [1957/2000] (progress of the epoch: 0.13)
Accuracy on batch 5: 0.982 [1964/2000] (progress of the epoch: 0.17)
Accuracy on batch 6: 0.980 [1960/2000] (progress of the epoch: 0.20)

Accuracy on batch 7: 0.982 [1963/2000] (progress of the epoch: 0.23)
Accuracy on batch 8: 0.984 [1967/2000] (progress of the epoch: 0.27)
Accuracy on batch 9: 0.982 [1964/2000] (progress of the epoch: 0.30)
Accuracy on batch 10: 0.980 [1959/2000] (progress of the epoch: 0.33)
Accuracy on batch 11: 0.979 [1958/2000] (progress of the epoch: 0.37)
Accuracy on batch 12: 0.982 [1963/2000] (progress of the epoch: 0.40)
Accuracy on batch 13: 0.980 [1959/2000] (progress of the epoch: 0.43)
Accuracy on batch 14: 0.988 [1976/2000] (progress of the epoch: 0.47)
Accuracy on batch 15: 0.982 [1964/2000] (progress of the epoch: 0.50)
Accuracy on batch 16: 0.981 [1962/2000] (progress of the epoch: 0.53)
Accuracy on batch 17: 0.982 [1964/2000] (progress of the epoch: 0.57)
Accuracy on batch 18: 0.986 [1971/2000] (progress of the epoch: 0.60)
Accuracy on batch 19: 0.984 [1968/2000] (progress of the epoch: 0.63)
Accuracy on batch 20: 0.979 [1958/2000] (progress of the epoch: 0.67)
Accuracy on batch 21: 0.984 [1967/2000] (progress of the epoch: 0.70)
Accuracy on batch 22: 0.986 [1972/2000] (progress of the epoch: 0.73)
Accuracy on batch 23: 0.984 [1968/2000] (progress of the epoch: 0.77)
Accuracy on batch 24: 0.984 [1968/2000] (progress of the epoch: 0.80)
Accuracy on batch 25: 0.980 [1960/2000] (progress of the epoch: 0.83)
Accuracy on batch 26: 0.983 [1965/2000] (progress of the epoch: 0.87)
Accuracy on batch 27: 0.978 [1956/2000] (progress of the epoch: 0.90)
Accuracy on batch 28: 0.982 [1963/2000] (progress of the epoch: 0.93)
Accuracy on batch 29: 0.985 [1969/2000] (progress of the epoch: 0.97)
Accuracy on batch 30: 0.985 [1970/2000] (progress of the epoch: 1.00)

Accuracy on test data: 0.983 [9831/10000]

Epoch 10:

Accuracy on batch 1: 0.983 [1965/2000] (progress of the epoch: 0.03)
Accuracy on batch 2: 0.984 [1968/2000] (progress of the epoch: 0.07)
Accuracy on batch 3: 0.986 [1972/2000] (progress of the epoch: 0.10)
Accuracy on batch 4: 0.980 [1960/2000] (progress of the epoch: 0.13)
Accuracy on batch 5: 0.985 [1970/2000] (progress of the epoch: 0.17)
Accuracy on batch 6: 0.985 [1969/2000] (progress of the epoch: 0.20)
Accuracy on batch 7: 0.983 [1965/2000] (progress of the epoch: 0.23)
Accuracy on batch 8: 0.980 [1960/2000] (progress of the epoch: 0.27)
Accuracy on batch 9: 0.982 [1963/2000] (progress of the epoch: 0.30)
Accuracy on batch 10: 0.984 [1967/2000] (progress of the epoch: 0.33)
Accuracy on batch 11: 0.985 [1969/2000] (progress of the epoch: 0.37)
Accuracy on batch 12: 0.976 [1952/2000] (progress of the epoch: 0.40)
Accuracy on batch 13: 0.983 [1966/2000] (progress of the epoch: 0.43)
Accuracy on batch 14: 0.981 [1962/2000] (progress of the epoch: 0.47)
Accuracy on batch 15: 0.984 [1968/2000] (progress of the epoch: 0.50)
Accuracy on batch 16: 0.984 [1968/2000] (progress of the epoch: 0.53)
Accuracy on batch 17: 0.981 [1962/2000] (progress of the epoch: 0.57)
Accuracy on batch 18: 0.984 [1968/2000] (progress of the epoch: 0.60)

Accuracy on batch 19: 0.981 [1962/2000] (progress of the epoch: 0.63)
Accuracy on batch 20: 0.981 [1961/2000] (progress of the epoch: 0.67)
Accuracy on batch 21: 0.986 [1971/2000] (progress of the epoch: 0.70)
Accuracy on batch 22: 0.982 [1964/2000] (progress of the epoch: 0.73)
Accuracy on batch 23: 0.985 [1969/2000] (progress of the epoch: 0.77)
Accuracy on batch 24: 0.987 [1973/2000] (progress of the epoch: 0.80)
Accuracy on batch 25: 0.989 [1977/2000] (progress of the epoch: 0.83)
Accuracy on batch 26: 0.988 [1976/2000] (progress of the epoch: 0.87)
Accuracy on batch 27: 0.982 [1963/2000] (progress of the epoch: 0.90)
Accuracy on batch 28: 0.980 [1960/2000] (progress of the epoch: 0.93)
Accuracy on batch 29: 0.989 [1977/2000] (progress of the epoch: 0.97)
Accuracy on batch 30: 0.981 [1962/2000] (progress of the epoch: 1.00)

Accuracy on test data: 0.983 [9829/10000]

Epoch 11:

Accuracy on batch 1: 0.980 [1959/2000] (progress of the epoch: 0.03)
Accuracy on batch 2: 0.984 [1967/2000] (progress of the epoch: 0.07)
Accuracy on batch 3: 0.983 [1966/2000] (progress of the epoch: 0.10)
Accuracy on batch 4: 0.988 [1976/2000] (progress of the epoch: 0.13)
Accuracy on batch 5: 0.987 [1973/2000] (progress of the epoch: 0.17)
Accuracy on batch 6: 0.986 [1972/2000] (progress of the epoch: 0.20)
Accuracy on batch 7: 0.982 [1963/2000] (progress of the epoch: 0.23)
Accuracy on batch 8: 0.982 [1963/2000] (progress of the epoch: 0.27)
Accuracy on batch 9: 0.985 [1969/2000] (progress of the epoch: 0.30)
Accuracy on batch 10: 0.988 [1975/2000] (progress of the epoch: 0.33)
Accuracy on batch 11: 0.985 [1969/2000] (progress of the epoch: 0.37)
Accuracy on batch 12: 0.983 [1966/2000] (progress of the epoch: 0.40)
Accuracy on batch 13: 0.984 [1967/2000] (progress of the epoch: 0.43)
Accuracy on batch 14: 0.987 [1974/2000] (progress of the epoch: 0.47)
Accuracy on batch 15: 0.981 [1962/2000] (progress of the epoch: 0.50)
Accuracy on batch 16: 0.984 [1967/2000] (progress of the epoch: 0.53)
Accuracy on batch 17: 0.985 [1969/2000] (progress of the epoch: 0.57)
Accuracy on batch 18: 0.986 [1971/2000] (progress of the epoch: 0.60)
Accuracy on batch 19: 0.984 [1968/2000] (progress of the epoch: 0.63)
Accuracy on batch 20: 0.980 [1960/2000] (progress of the epoch: 0.67)
Accuracy on batch 21: 0.985 [1969/2000] (progress of the epoch: 0.70)
Accuracy on batch 22: 0.988 [1975/2000] (progress of the epoch: 0.73)
Accuracy on batch 23: 0.987 [1973/2000] (progress of the epoch: 0.77)
Accuracy on batch 24: 0.989 [1978/2000] (progress of the epoch: 0.80)
Accuracy on batch 25: 0.982 [1964/2000] (progress of the epoch: 0.83)
Accuracy on batch 26: 0.988 [1976/2000] (progress of the epoch: 0.87)
Accuracy on batch 27: 0.981 [1961/2000] (progress of the epoch: 0.90)
Accuracy on batch 28: 0.984 [1968/2000] (progress of the epoch: 0.93)
Accuracy on batch 29: 0.983 [1965/2000] (progress of the epoch: 0.97)
Accuracy on batch 30: 0.989 [1978/2000] (progress of the epoch: 1.00)

Accuracy on test data: 0.986 [9859/10000]

Epoch 12:

Accuracy on batch 1: 0.986 [1972/2000] (progress of the epoch: 0.03)
Accuracy on batch 2: 0.985 [1969/2000] (progress of the epoch: 0.07)
Accuracy on batch 3: 0.989 [1978/2000] (progress of the epoch: 0.10)
Accuracy on batch 4: 0.986 [1972/2000] (progress of the epoch: 0.13)
Accuracy on batch 5: 0.985 [1969/2000] (progress of the epoch: 0.17)
Accuracy on batch 6: 0.985 [1969/2000] (progress of the epoch: 0.20)
Accuracy on batch 7: 0.984 [1967/2000] (progress of the epoch: 0.23)
Accuracy on batch 8: 0.988 [1976/2000] (progress of the epoch: 0.27)
Accuracy on batch 9: 0.981 [1961/2000] (progress of the epoch: 0.30)
Accuracy on batch 10: 0.988 [1975/2000] (progress of the epoch: 0.33)
Accuracy on batch 11: 0.989 [1977/2000] (progress of the epoch: 0.37)
Accuracy on batch 12: 0.989 [1977/2000] (progress of the epoch: 0.40)
Accuracy on batch 13: 0.985 [1969/2000] (progress of the epoch: 0.43)
Accuracy on batch 14: 0.986 [1971/2000] (progress of the epoch: 0.47)
Accuracy on batch 15: 0.980 [1960/2000] (progress of the epoch: 0.50)
Accuracy on batch 16: 0.985 [1970/2000] (progress of the epoch: 0.53)
Accuracy on batch 17: 0.986 [1971/2000] (progress of the epoch: 0.57)
Accuracy on batch 18: 0.986 [1971/2000] (progress of the epoch: 0.60)
Accuracy on batch 19: 0.987 [1973/2000] (progress of the epoch: 0.63)
Accuracy on batch 20: 0.991 [1981/2000] (progress of the epoch: 0.67)
Accuracy on batch 21: 0.983 [1965/2000] (progress of the epoch: 0.70)
Accuracy on batch 22: 0.987 [1973/2000] (progress of the epoch: 0.73)
Accuracy on batch 23: 0.984 [1968/2000] (progress of the epoch: 0.77)
Accuracy on batch 24: 0.984 [1967/2000] (progress of the epoch: 0.80)
Accuracy on batch 25: 0.989 [1978/2000] (progress of the epoch: 0.83)
Accuracy on batch 26: 0.983 [1965/2000] (progress of the epoch: 0.87)
Accuracy on batch 27: 0.985 [1970/2000] (progress of the epoch: 0.90)
Accuracy on batch 28: 0.983 [1966/2000] (progress of the epoch: 0.93)
Accuracy on batch 29: 0.982 [1963/2000] (progress of the epoch: 0.97)
Accuracy on batch 30: 0.981 [1961/2000] (progress of the epoch: 1.00)

Accuracy on test data: 0.983 [9834/10000]

Epoch 13:

Accuracy on batch 1: 0.978 [1955/2000] (progress of the epoch: 0.03)
Accuracy on batch 2: 0.988 [1976/2000] (progress of the epoch: 0.07)
Accuracy on batch 3: 0.986 [1971/2000] (progress of the epoch: 0.10)
Accuracy on batch 4: 0.984 [1968/2000] (progress of the epoch: 0.13)
Accuracy on batch 5: 0.983 [1966/2000] (progress of the epoch: 0.17)
Accuracy on batch 6: 0.984 [1968/2000] (progress of the epoch: 0.20)
Accuracy on batch 7: 0.988 [1975/2000] (progress of the epoch: 0.23)
Accuracy on batch 8: 0.984 [1968/2000] (progress of the epoch: 0.27)
Accuracy on batch 9: 0.986 [1972/2000] (progress of the epoch: 0.30)
Accuracy on batch 10: 0.982 [1963/2000] (progress of the epoch: 0.33)

Accuracy on batch 11: 0.985 [1969/2000] (progress of the epoch: 0.37)
Accuracy on batch 12: 0.985 [1970/2000] (progress of the epoch: 0.40)
Accuracy on batch 13: 0.986 [1972/2000] (progress of the epoch: 0.43)
Accuracy on batch 14: 0.983 [1966/2000] (progress of the epoch: 0.47)
Accuracy on batch 15: 0.989 [1978/2000] (progress of the epoch: 0.50)
Accuracy on batch 16: 0.988 [1975/2000] (progress of the epoch: 0.53)
Accuracy on batch 17: 0.987 [1974/2000] (progress of the epoch: 0.57)
Accuracy on batch 18: 0.984 [1968/2000] (progress of the epoch: 0.60)
Accuracy on batch 19: 0.984 [1967/2000] (progress of the epoch: 0.63)
Accuracy on batch 20: 0.983 [1965/2000] (progress of the epoch: 0.67)
Accuracy on batch 21: 0.985 [1970/2000] (progress of the epoch: 0.70)
Accuracy on batch 22: 0.987 [1973/2000] (progress of the epoch: 0.73)
Accuracy on batch 23: 0.985 [1969/2000] (progress of the epoch: 0.77)
Accuracy on batch 24: 0.981 [1962/2000] (progress of the epoch: 0.80)
Accuracy on batch 25: 0.984 [1968/2000] (progress of the epoch: 0.83)
Accuracy on batch 26: 0.985 [1970/2000] (progress of the epoch: 0.87)
Accuracy on batch 27: 0.985 [1969/2000] (progress of the epoch: 0.90)
Accuracy on batch 28: 0.989 [1977/2000] (progress of the epoch: 0.93)
Accuracy on batch 29: 0.986 [1971/2000] (progress of the epoch: 0.97)
Accuracy on batch 30: 0.985 [1970/2000] (progress of the epoch: 1.00)

Accuracy on test data: 0.986 [9857/10000]

Epoch 14:

Accuracy on batch 1: 0.984 [1968/2000] (progress of the epoch: 0.03)
Accuracy on batch 2: 0.990 [1979/2000] (progress of the epoch: 0.07)
Accuracy on batch 3: 0.989 [1977/2000] (progress of the epoch: 0.10)
Accuracy on batch 4: 0.983 [1965/2000] (progress of the epoch: 0.13)
Accuracy on batch 5: 0.990 [1980/2000] (progress of the epoch: 0.17)
Accuracy on batch 6: 0.984 [1968/2000] (progress of the epoch: 0.20)
Accuracy on batch 7: 0.985 [1969/2000] (progress of the epoch: 0.23)
Accuracy on batch 8: 0.987 [1974/2000] (progress of the epoch: 0.27)
Accuracy on batch 9: 0.990 [1979/2000] (progress of the epoch: 0.30)
Accuracy on batch 10: 0.984 [1968/2000] (progress of the epoch: 0.33)
Accuracy on batch 11: 0.984 [1968/2000] (progress of the epoch: 0.37)
Accuracy on batch 12: 0.989 [1978/2000] (progress of the epoch: 0.40)
Accuracy on batch 13: 0.986 [1971/2000] (progress of the epoch: 0.43)
Accuracy on batch 14: 0.987 [1973/2000] (progress of the epoch: 0.47)
Accuracy on batch 15: 0.991 [1981/2000] (progress of the epoch: 0.50)
Accuracy on batch 16: 0.986 [1971/2000] (progress of the epoch: 0.53)
Accuracy on batch 17: 0.990 [1979/2000] (progress of the epoch: 0.57)
Accuracy on batch 18: 0.987 [1973/2000] (progress of the epoch: 0.60)
Accuracy on batch 19: 0.990 [1979/2000] (progress of the epoch: 0.63)
Accuracy on batch 20: 0.992 [1983/2000] (progress of the epoch: 0.67)
Accuracy on batch 21: 0.989 [1977/2000] (progress of the epoch: 0.70)
Accuracy on batch 22: 0.982 [1964/2000] (progress of the epoch: 0.73)

Accuracy on batch 23: 0.989 [1977/2000] (progress of the epoch: 0.77)
Accuracy on batch 24: 0.985 [1969/2000] (progress of the epoch: 0.80)
Accuracy on batch 25: 0.981 [1961/2000] (progress of the epoch: 0.83)
Accuracy on batch 26: 0.989 [1977/2000] (progress of the epoch: 0.87)
Accuracy on batch 27: 0.990 [1980/2000] (progress of the epoch: 0.90)
Accuracy on batch 28: 0.990 [1979/2000] (progress of the epoch: 0.93)
Accuracy on batch 29: 0.990 [1979/2000] (progress of the epoch: 0.97)
Accuracy on batch 30: 0.984 [1967/2000] (progress of the epoch: 1.00)

Accuracy on test data: 0.988 [9877/10000]

Epoch 15:

Accuracy on batch 1: 0.988 [1976/2000] (progress of the epoch: 0.03)
Accuracy on batch 2: 0.988 [1975/2000] (progress of the epoch: 0.07)
Accuracy on batch 3: 0.985 [1970/2000] (progress of the epoch: 0.10)
Accuracy on batch 4: 0.985 [1969/2000] (progress of the epoch: 0.13)
Accuracy on batch 5: 0.984 [1967/2000] (progress of the epoch: 0.17)
Accuracy on batch 6: 0.990 [1980/2000] (progress of the epoch: 0.20)
Accuracy on batch 7: 0.987 [1974/2000] (progress of the epoch: 0.23)
Accuracy on batch 8: 0.989 [1978/2000] (progress of the epoch: 0.27)
Accuracy on batch 9: 0.989 [1977/2000] (progress of the epoch: 0.30)
Accuracy on batch 10: 0.993 [1985/2000] (progress of the epoch: 0.33)
Accuracy on batch 11: 0.989 [1978/2000] (progress of the epoch: 0.37)
Accuracy on batch 12: 0.990 [1979/2000] (progress of the epoch: 0.40)
Accuracy on batch 13: 0.989 [1977/2000] (progress of the epoch: 0.43)
Accuracy on batch 14: 0.992 [1983/2000] (progress of the epoch: 0.47)
Accuracy on batch 15: 0.990 [1979/2000] (progress of the epoch: 0.50)
Accuracy on batch 16: 0.992 [1983/2000] (progress of the epoch: 0.53)
Accuracy on batch 17: 0.988 [1976/2000] (progress of the epoch: 0.57)
Accuracy on batch 18: 0.988 [1976/2000] (progress of the epoch: 0.60)
Accuracy on batch 19: 0.988 [1976/2000] (progress of the epoch: 0.63)
Accuracy on batch 20: 0.990 [1980/2000] (progress of the epoch: 0.67)
Accuracy on batch 21: 0.990 [1980/2000] (progress of the epoch: 0.70)
Accuracy on batch 22: 0.990 [1980/2000] (progress of the epoch: 0.73)
Accuracy on batch 23: 0.989 [1978/2000] (progress of the epoch: 0.77)
Accuracy on batch 24: 0.990 [1980/2000] (progress of the epoch: 0.80)
Accuracy on batch 25: 0.990 [1979/2000] (progress of the epoch: 0.83)
Accuracy on batch 26: 0.989 [1978/2000] (progress of the epoch: 0.87)
Accuracy on batch 27: 0.989 [1977/2000] (progress of the epoch: 0.90)
Accuracy on batch 28: 0.986 [1972/2000] (progress of the epoch: 0.93)
Accuracy on batch 29: 0.986 [1971/2000] (progress of the epoch: 0.97)
Accuracy on batch 30: 0.990 [1979/2000] (progress of the epoch: 1.00)

Accuracy on test data: 0.987 [9874/10000]

Epoch 16:

Accuracy on batch 1: 0.989 [1977/2000] (progress of the epoch: 0.03)
Accuracy on batch 2: 0.990 [1979/2000] (progress of the epoch: 0.07)

Accuracy on batch 3: 0.987 [1973/2000] (progress of the epoch: 0.10)
Accuracy on batch 4: 0.988 [1975/2000] (progress of the epoch: 0.13)
Accuracy on batch 5: 0.989 [1977/2000] (progress of the epoch: 0.17)
Accuracy on batch 6: 0.988 [1976/2000] (progress of the epoch: 0.20)
Accuracy on batch 7: 0.983 [1966/2000] (progress of the epoch: 0.23)
Accuracy on batch 8: 0.990 [1979/2000] (progress of the epoch: 0.27)
Accuracy on batch 9: 0.990 [1979/2000] (progress of the epoch: 0.30)
Accuracy on batch 10: 0.991 [1981/2000] (progress of the epoch: 0.33)
Accuracy on batch 11: 0.989 [1978/2000] (progress of the epoch: 0.37)
Accuracy on batch 12: 0.990 [1979/2000] (progress of the epoch: 0.40)
Accuracy on batch 13: 0.988 [1976/2000] (progress of the epoch: 0.43)
Accuracy on batch 14: 0.987 [1973/2000] (progress of the epoch: 0.47)
Accuracy on batch 15: 0.986 [1972/2000] (progress of the epoch: 0.50)
Accuracy on batch 16: 0.992 [1983/2000] (progress of the epoch: 0.53)
Accuracy on batch 17: 0.991 [1982/2000] (progress of the epoch: 0.57)
Accuracy on batch 18: 0.992 [1984/2000] (progress of the epoch: 0.60)
Accuracy on batch 19: 0.987 [1974/2000] (progress of the epoch: 0.63)
Accuracy on batch 20: 0.986 [1972/2000] (progress of the epoch: 0.67)
Accuracy on batch 21: 0.992 [1984/2000] (progress of the epoch: 0.70)
Accuracy on batch 22: 0.992 [1984/2000] (progress of the epoch: 0.73)
Accuracy on batch 23: 0.991 [1981/2000] (progress of the epoch: 0.77)
Accuracy on batch 24: 0.988 [1976/2000] (progress of the epoch: 0.80)
Accuracy on batch 25: 0.993 [1985/2000] (progress of the epoch: 0.83)
Accuracy on batch 26: 0.989 [1977/2000] (progress of the epoch: 0.87)
Accuracy on batch 27: 0.993 [1985/2000] (progress of the epoch: 0.90)
Accuracy on batch 28: 0.987 [1974/2000] (progress of the epoch: 0.93)
Accuracy on batch 29: 0.993 [1985/2000] (progress of the epoch: 0.97)
Accuracy on batch 30: 0.991 [1982/2000] (progress of the epoch: 1.00)

Accuracy on test data: 0.990 [9899/10000]

Epoch 17:

Accuracy on batch 1: 0.991 [1982/2000] (progress of the epoch: 0.03)
Accuracy on batch 2: 0.990 [1980/2000] (progress of the epoch: 0.07)
Accuracy on batch 3: 0.990 [1979/2000] (progress of the epoch: 0.10)
Accuracy on batch 4: 0.990 [1980/2000] (progress of the epoch: 0.13)
Accuracy on batch 5: 0.988 [1976/2000] (progress of the epoch: 0.17)
Accuracy on batch 6: 0.992 [1984/2000] (progress of the epoch: 0.20)
Accuracy on batch 7: 0.993 [1986/2000] (progress of the epoch: 0.23)
Accuracy on batch 8: 0.987 [1974/2000] (progress of the epoch: 0.27)
Accuracy on batch 9: 0.994 [1987/2000] (progress of the epoch: 0.30)
Accuracy on batch 10: 0.994 [1987/2000] (progress of the epoch: 0.33)
Accuracy on batch 11: 0.990 [1979/2000] (progress of the epoch: 0.37)
Accuracy on batch 12: 0.993 [1986/2000] (progress of the epoch: 0.40)
Accuracy on batch 13: 0.992 [1984/2000] (progress of the epoch: 0.43)
Accuracy on batch 14: 0.994 [1987/2000] (progress of the epoch: 0.47)

Accuracy on batch 15: 0.991 [1981/2000] (progress of the epoch: 0.50)
Accuracy on batch 16: 0.989 [1978/2000] (progress of the epoch: 0.53)
Accuracy on batch 17: 0.993 [1986/2000] (progress of the epoch: 0.57)
Accuracy on batch 18: 0.986 [1971/2000] (progress of the epoch: 0.60)
Accuracy on batch 19: 0.992 [1983/2000] (progress of the epoch: 0.63)
Accuracy on batch 20: 0.989 [1978/2000] (progress of the epoch: 0.67)
Accuracy on batch 21: 0.992 [1984/2000] (progress of the epoch: 0.70)
Accuracy on batch 22: 0.988 [1975/2000] (progress of the epoch: 0.73)
Accuracy on batch 23: 0.989 [1978/2000] (progress of the epoch: 0.77)
Accuracy on batch 24: 0.990 [1980/2000] (progress of the epoch: 0.80)
Accuracy on batch 25: 0.986 [1972/2000] (progress of the epoch: 0.83)
Accuracy on batch 26: 0.991 [1982/2000] (progress of the epoch: 0.87)
Accuracy on batch 27: 0.990 [1979/2000] (progress of the epoch: 0.90)
Accuracy on batch 28: 0.990 [1979/2000] (progress of the epoch: 0.93)
Accuracy on batch 29: 0.988 [1976/2000] (progress of the epoch: 0.97)
Accuracy on batch 30: 0.987 [1974/2000] (progress of the epoch: 1.00)

Accuracy on test data: 0.988 [9884/10000]

Epoch 18:

Accuracy on batch 1: 0.990 [1979/2000] (progress of the epoch: 0.03)
Accuracy on batch 2: 0.988 [1976/2000] (progress of the epoch: 0.07)
Accuracy on batch 3: 0.991 [1981/2000] (progress of the epoch: 0.10)
Accuracy on batch 4: 0.994 [1988/2000] (progress of the epoch: 0.13)
Accuracy on batch 5: 0.990 [1980/2000] (progress of the epoch: 0.17)
Accuracy on batch 6: 0.994 [1988/2000] (progress of the epoch: 0.20)
Accuracy on batch 7: 0.991 [1981/2000] (progress of the epoch: 0.23)
Accuracy on batch 8: 0.991 [1981/2000] (progress of the epoch: 0.27)
Accuracy on batch 9: 0.989 [1978/2000] (progress of the epoch: 0.30)
Accuracy on batch 10: 0.988 [1976/2000] (progress of the epoch: 0.33)
Accuracy on batch 11: 0.987 [1974/2000] (progress of the epoch: 0.37)
Accuracy on batch 12: 0.992 [1983/2000] (progress of the epoch: 0.40)
Accuracy on batch 13: 0.991 [1981/2000] (progress of the epoch: 0.43)
Accuracy on batch 14: 0.990 [1979/2000] (progress of the epoch: 0.47)
Accuracy on batch 15: 0.993 [1985/2000] (progress of the epoch: 0.50)
Accuracy on batch 16: 0.993 [1985/2000] (progress of the epoch: 0.53)
Accuracy on batch 17: 0.988 [1975/2000] (progress of the epoch: 0.57)
Accuracy on batch 18: 0.991 [1982/2000] (progress of the epoch: 0.60)
Accuracy on batch 19: 0.987 [1974/2000] (progress of the epoch: 0.63)
Accuracy on batch 20: 0.989 [1977/2000] (progress of the epoch: 0.67)
Accuracy on batch 21: 0.988 [1976/2000] (progress of the epoch: 0.70)
Accuracy on batch 22: 0.992 [1984/2000] (progress of the epoch: 0.73)
Accuracy on batch 23: 0.990 [1979/2000] (progress of the epoch: 0.77)
Accuracy on batch 24: 0.992 [1983/2000] (progress of the epoch: 0.80)
Accuracy on batch 25: 0.993 [1985/2000] (progress of the epoch: 0.83)
Accuracy on batch 26: 0.994 [1988/2000] (progress of the epoch: 0.87)

Accuracy on batch 27: 0.989 [1978/2000] (progress of the epoch: 0.90)
Accuracy on batch 28: 0.994 [1987/2000] (progress of the epoch: 0.93)
Accuracy on batch 29: 0.989 [1977/2000] (progress of the epoch: 0.97)
Accuracy on batch 30: 0.993 [1985/2000] (progress of the epoch: 1.00)

Accuracy on test data: 0.989 [9885/10000]

Epoch 19:

Accuracy on batch 1: 0.985 [1969/2000] (progress of the epoch: 0.03)
Accuracy on batch 2: 0.990 [1979/2000] (progress of the epoch: 0.07)
Accuracy on batch 3: 0.987 [1973/2000] (progress of the epoch: 0.10)
Accuracy on batch 4: 0.990 [1980/2000] (progress of the epoch: 0.13)
Accuracy on batch 5: 0.986 [1972/2000] (progress of the epoch: 0.17)
Accuracy on batch 6: 0.989 [1977/2000] (progress of the epoch: 0.20)
Accuracy on batch 7: 0.993 [1985/2000] (progress of the epoch: 0.23)
Accuracy on batch 8: 0.989 [1978/2000] (progress of the epoch: 0.27)
Accuracy on batch 9: 0.995 [1990/2000] (progress of the epoch: 0.30)
Accuracy on batch 10: 0.992 [1983/2000] (progress of the epoch: 0.33)
Accuracy on batch 11: 0.989 [1978/2000] (progress of the epoch: 0.37)
Accuracy on batch 12: 0.993 [1986/2000] (progress of the epoch: 0.40)
Accuracy on batch 13: 0.992 [1984/2000] (progress of the epoch: 0.43)
Accuracy on batch 14: 0.992 [1984/2000] (progress of the epoch: 0.47)
Accuracy on batch 15: 0.993 [1985/2000] (progress of the epoch: 0.50)
Accuracy on batch 16: 0.990 [1979/2000] (progress of the epoch: 0.53)
Accuracy on batch 17: 0.992 [1984/2000] (progress of the epoch: 0.57)
Accuracy on batch 18: 0.992 [1983/2000] (progress of the epoch: 0.60)
Accuracy on batch 19: 0.995 [1989/2000] (progress of the epoch: 0.63)
Accuracy on batch 20: 0.989 [1977/2000] (progress of the epoch: 0.67)
Accuracy on batch 21: 0.992 [1983/2000] (progress of the epoch: 0.70)
Accuracy on batch 22: 0.990 [1980/2000] (progress of the epoch: 0.73)
Accuracy on batch 23: 0.996 [1992/2000] (progress of the epoch: 0.77)
Accuracy on batch 24: 0.990 [1980/2000] (progress of the epoch: 0.80)
Accuracy on batch 25: 0.992 [1984/2000] (progress of the epoch: 0.83)
Accuracy on batch 26: 0.986 [1972/2000] (progress of the epoch: 0.87)
Accuracy on batch 27: 0.993 [1986/2000] (progress of the epoch: 0.90)
Accuracy on batch 28: 0.992 [1983/2000] (progress of the epoch: 0.93)
Accuracy on batch 29: 0.993 [1986/2000] (progress of the epoch: 0.97)
Accuracy on batch 30: 0.992 [1984/2000] (progress of the epoch: 1.00)

Accuracy on test data: 0.989 [9885/10000]

Epoch 20:

Accuracy on batch 1: 0.994 [1988/2000] (progress of the epoch: 0.03)
Accuracy on batch 2: 0.991 [1982/2000] (progress of the epoch: 0.07)
Accuracy on batch 3: 0.989 [1978/2000] (progress of the epoch: 0.10)
Accuracy on batch 4: 0.988 [1976/2000] (progress of the epoch: 0.13)
Accuracy on batch 5: 0.991 [1982/2000] (progress of the epoch: 0.17)
Accuracy on batch 6: 0.991 [1982/2000] (progress of the epoch: 0.20)

Accuracy on batch 7: 0.985 [1969/2000] (progress of the epoch: 0.23)
Accuracy on batch 8: 0.991 [1982/2000] (progress of the epoch: 0.27)
Accuracy on batch 9: 0.989 [1977/2000] (progress of the epoch: 0.30)
Accuracy on batch 10: 0.993 [1986/2000] (progress of the epoch: 0.33)
Accuracy on batch 11: 0.987 [1973/2000] (progress of the epoch: 0.37)
Accuracy on batch 12: 0.992 [1983/2000] (progress of the epoch: 0.40)
Accuracy on batch 13: 0.990 [1979/2000] (progress of the epoch: 0.43)
Accuracy on batch 14: 0.990 [1980/2000] (progress of the epoch: 0.47)
Accuracy on batch 15: 0.994 [1987/2000] (progress of the epoch: 0.50)
Accuracy on batch 16: 0.992 [1984/2000] (progress of the epoch: 0.53)
Accuracy on batch 17: 0.988 [1976/2000] (progress of the epoch: 0.57)
Accuracy on batch 18: 0.991 [1982/2000] (progress of the epoch: 0.60)
Accuracy on batch 19: 0.993 [1985/2000] (progress of the epoch: 0.63)
Accuracy on batch 20: 0.990 [1979/2000] (progress of the epoch: 0.67)
Accuracy on batch 21: 0.993 [1985/2000] (progress of the epoch: 0.70)
Accuracy on batch 22: 0.991 [1982/2000] (progress of the epoch: 0.73)
Accuracy on batch 23: 0.991 [1981/2000] (progress of the epoch: 0.77)
Accuracy on batch 24: 0.993 [1985/2000] (progress of the epoch: 0.80)
Accuracy on batch 25: 0.994 [1988/2000] (progress of the epoch: 0.83)
Accuracy on batch 26: 0.992 [1984/2000] (progress of the epoch: 0.87)
Accuracy on batch 27: 0.990 [1979/2000] (progress of the epoch: 0.90)
Accuracy on batch 28: 0.992 [1984/2000] (progress of the epoch: 0.93)
Accuracy on batch 29: 0.989 [1977/2000] (progress of the epoch: 0.97)
Accuracy on batch 30: 0.995 [1989/2000] (progress of the epoch: 1.00)
Accuracy on test data: 0.990 [9896/10000]