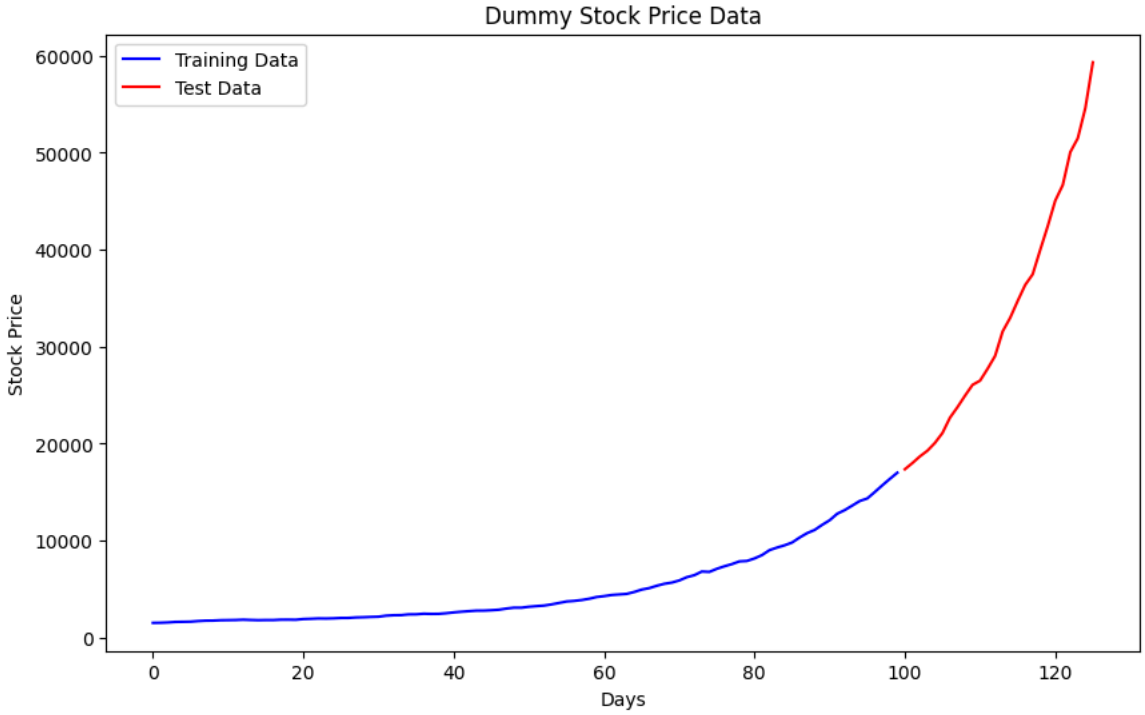
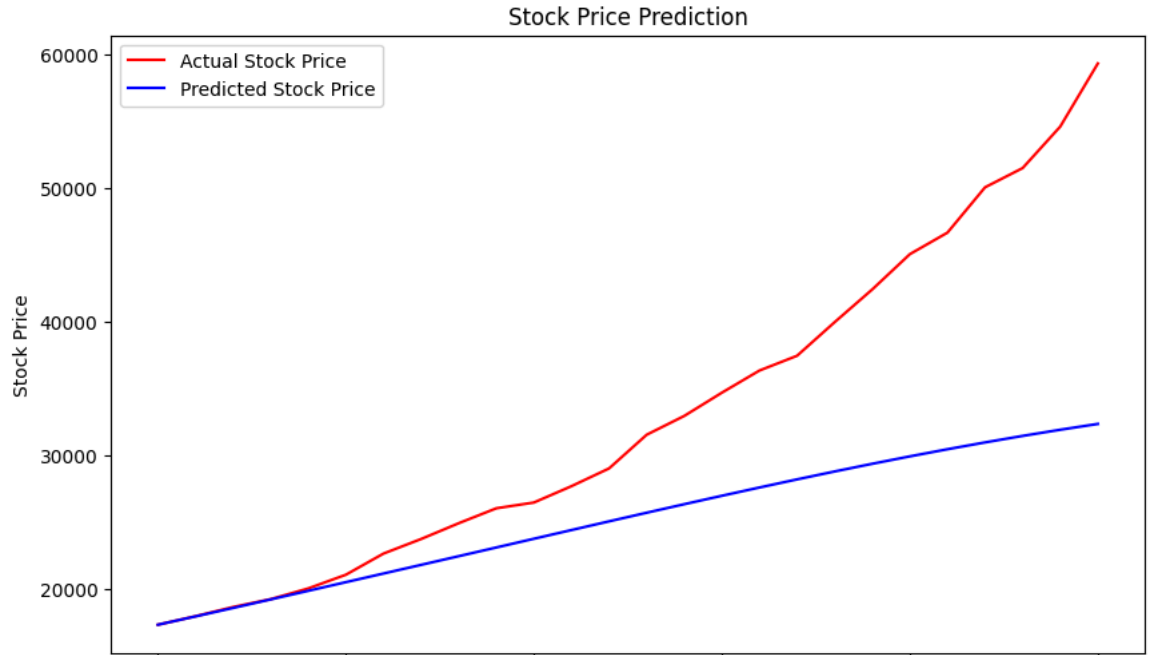
```
Generating dummy stock data...
```




```
Dummy data generated and visualized.
Data has been scaled using MinMaxScaler.
Training data reshaped to: (40, 60, 1)
/usr/local/lib/python3.12/dist-packages/keras/src/layers/rnn/rnn.py:199: UserWarning: Do not pass an `input_shape`/`input_dim` argum
  super().__init__(**kwargs)
Model compiled successfully.
Training the model...
Epoch 1/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 9s 106ms/step - loss: 0.3046
Epoch 2/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 1s 104ms/step - loss: 0.1811
Epoch 3/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 109ms/step - loss: 0.0585
Epoch 4/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 110ms/step - loss: 0.0314
Epoch 5/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 104ms/step - loss: 0.0571
Epoch 6/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 103ms/step - loss: 0.0165
Epoch 7/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 99ms/step - loss: 0.0182
Epoch 8/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 107ms/step - loss: 0.0268
Epoch 9/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 100ms/step - loss: 0.0277
Epoch 10/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 102ms/step - loss: 0.0134
Epoch 11/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 103ms/step - loss: 0.0096
Epoch 12/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 101ms/step - loss: 0.0150
Epoch 13/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 131ms/step - loss: 0.0165
Epoch 14/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 101ms/step - loss: 0.0167
Epoch 15/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 100ms/step - loss: 0.0060
Epoch 16/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 120ms/step - loss: 0.0068
Epoch 17/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 104ms/step - loss: 0.0108
Epoch 18/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 100ms/step - loss: 0.0092
Epoch 19/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 106ms/step - loss: 0.0040
Epoch 20/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 101ms/step - loss: 0.0029
Epoch 21/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 99ms/step - loss: 0.0061
Epoch 22/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 98ms/step - loss: 0.0042
Epoch 23/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 108ms/step - loss: 0.0028
Epoch 24/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 118ms/step - loss: 0.0080
Epoch 25/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 102ms/step - loss: 0.0038
Epoch 26/100
```

```
Epoch 26/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 107ms/step - loss: 0.0067
Epoch 27/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 101ms/step - loss: 0.0038
Epoch 28/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 121ms/step - loss: 0.0060
Epoch 29/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 103ms/step - loss: 0.0022
Epoch 30/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 103ms/step - loss: 0.0066
Epoch 31/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 105ms/step - loss: 0.0040
Epoch 32/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 115ms/step - loss: 0.0038
Epoch 33/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 162ms/step - loss: 0.0034
Epoch 34/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 1s 167ms/step - loss: 0.0038
Epoch 35/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 1s 176ms/step - loss: 0.0041
Epoch 36/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 1s 158ms/step - loss: 0.0025
Epoch 37/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 107ms/step - loss: 0.0058
Epoch 38/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 107ms/step - loss: 0.0060
Epoch 39/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 102ms/step - loss: 0.0026
Epoch 40/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 103ms/step - loss: 0.0020
Epoch 41/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 106ms/step - loss: 0.0029
Epoch 42/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 105ms/step - loss: 0.0033
Epoch 43/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 118ms/step - loss: 0.0021
Epoch 44/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 102ms/step - loss: 0.0029
Epoch 45/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 108ms/step - loss: 0.0035
Epoch 46/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 101ms/step - loss: 0.0045
Epoch 47/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 106ms/step - loss: 0.0042
Epoch 48/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 108ms/step - loss: 0.0038
Epoch 49/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 104ms/step - loss: 0.0038
Epoch 50/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 101ms/step - loss: 0.0021
Epoch 51/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 100ms/step - loss: 0.0030
Epoch 52/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 101ms/step - loss: 0.0045
Epoch 53/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 109ms/step - loss: 0.0024
Epoch 54/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 101ms/step - loss: 0.0019
Epoch 55/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 100ms/step - loss: 0.0032
Epoch 56/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 103ms/step - loss: 0.0051
Epoch 57/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 100ms/step - loss: 0.0038
Epoch 58/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 102ms/step - loss: 0.0034
Epoch 59/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 99ms/step - loss: 0.0033
Epoch 60/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 106ms/step - loss: 0.0031
Epoch 61/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 104ms/step - loss: 0.0027
Epoch 62/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 103ms/step - loss: 0.0034
Epoch 63/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 101ms/step - loss: 0.0048
Epoch 64/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 107ms/step - loss: 0.0025
Epoch 65/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 103ms/step - loss: 0.0032
Epoch 66/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 103ms/step - loss: 0.0047
Epoch 67/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 152ms/step - loss: 0.0035
Epoch 68/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 103ms/step - loss: 0.0072
Epoch 69/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 102ms/step - loss: 0.0035
Epoch 70/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 102ms/step - loss: 0.0034
Epoch 71/100
```

```
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 117ms/step - loss: 0.0026
Epoch 72/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 103ms/step - loss: 0.0028
Epoch 73/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 105ms/step - loss: 0.0033
Epoch 74/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 112ms/step - loss: 0.0033
Epoch 75/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 158ms/step - loss: 0.0032
Epoch 76/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 156ms/step - loss: 0.0032
Epoch 77/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 158ms/step - loss: 0.0023
Epoch 78/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 160ms/step - loss: 0.0023
Epoch 79/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 159ms/step - loss: 0.0040
Epoch 80/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 1s 185ms/step - loss: 0.0031
Epoch 81/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 110ms/step - loss: 0.0025
Epoch 82/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 113ms/step - loss: 0.0028
Epoch 83/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 124ms/step - loss: 0.0022
Epoch 84/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 106ms/step - loss: 0.0031
Epoch 85/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 105ms/step - loss: 0.0034
Epoch 86/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 109ms/step - loss: 0.0028
Epoch 87/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 101ms/step - loss: 0.0031
Epoch 88/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 103ms/step - loss: 0.0037
Epoch 89/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 102ms/step - loss: 0.0045
Epoch 90/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 108ms/step - loss: 0.0026
Epoch 91/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 106ms/step - loss: 0.0025
Epoch 92/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 102ms/step - loss: 0.0023
Epoch 93/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 100ms/step - loss: 0.0024
Epoch 94/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 105ms/step - loss: 0.0021
Epoch 95/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 101ms/step - loss: 0.0034
Epoch 96/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 101ms/step - loss: 0.0034
Epoch 97/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 99ms/step - loss: 0.0032
Epoch 98/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 106ms/step - loss: 0.0040
Epoch 99/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 104ms/step - loss: 0.0027
Epoch 100/100
2/2 ━━━━━━━━━━━━━━━━━━━━ 0s 100ms/step - loss: 0.0027
Model training complete.
1/1 ━━━━━━━━━━━━━━━━━━━━ 1s 825ms/step
Predictions complete.
```




```
Visualization complete
```