Abstract— in recent years, it is the aim of the Quantitative investment field that how to predict the price of stock precisely. However, because of several of the external factors, using the traditional method to predict the stock is very difficult. Furthermore, traditional method only rely on linear regression and parameter estimation, which cannot accurately identify or catch important features, furthermore, the quantitative investment method of stocks is based on stock technical data, fundamentals and other indicators to select stocks. But the subsequent operations can only be based on the judgment of investors themselves, who even cannot accurately predict the range of increase. This paper outlines the commercial value of stock forecasting in real life, briefly introduces the background of quantitative investment and some methods of time series analysis and forecasting, which also introduces the domestic and foreign development status of LSTM networks in the field of stock forecasting. At the same time, it focuses on the principle and core structure of the LSTM network, giving some related functional equations. It focuses on the source, attributes and company general analysis of the stock data used in this article. Proposing a method for predicting multiple units in the future. This paper proposes the LSTM network through Google’s deep learning framework TensorFlow and Python language, which perform comparative experiments on data normalization, price proportionalization, forecasting the price of the next 5 days and forecasting the price of the next 1 day. Predicting the future price of stocks through using the LSTM network as a model for training predictions and using historical data of stocks. Two simulated trading strategies are set up according to the prediction results of each stock on the first day of the future, respectively. Position trading strategy and T+0 trading strategy. The experiments show that both data normalization and price proportionalization can improve the accuracy of prediction to a certain extent. However, the later days, the lower the accuracy of predicting price, and the worse the model fit, but the judgment coefficient still exceeds 50%, which indicates that there is still a certain use value. In the comparative experiment predicting the next day, the judgment coefficients of the three stocks are all above 90%. The T+0 trading strategy has low risk control capabilities. In the case of substantial losses in actual stocks, the loss of the strategy is less. From the perspective of the efficiency of risk avoidance, T+0 strategy obviously has a better risk control ability.