INTRODUCTION

The key purpose of the research is to evolve a ICT based analysis, pattern and relation finding for stocks of the companies listed in Indian stock market which result into prediction of future stock price movement and finding out the stock market anomalies have been discovered via data mining of past prices and related or unrelated variables. Some definition and description related to my topic are as below.

1. STOCK

A stock or share is nothing but the ownership of the company divided into small parts is also called as equity or financial security which has basic value of rupees 10 each.

2. INDIAN STOCK MARKET

2.1 Stock Market

A stock market or equity market is a public entity for trading of company stock (share) and derivatives at an agreed price, these are securities listed on a stock exchange as well as those only traded privately. The Indian stock market at present is popular by two key names, viz. Bombay Stock Exchange (BSE) and National Stock Exchange (NSE). There are other small bourses, but these are two exchanges where major transactions take place.

2.2 National Stock Exchange (NSE)

The National Stock Exchange of India Limited or S&P CNX NIFTY (NSE) is a Mumbai-based stock exchange. It is the largest stock exchange in India in terms of daily turnover and number of trades, for both equities and derivative trading. The NSE’s key index is the S&P CNX Nifty, known as the Nifty, an index of fifty major stocks weighted by market capitalization. It has more than 2000 stocks from different sectors listed with it. It is fully automated electronic order processing exchange. Nifty is major index of NSE and it comprised of 50 scripts from different sectors.

2.3 Bombay Stock Exchange (BSE)

BSE, the oldest stock exchange in Asia. In BSE the largest number of companies listed on the Exchange covering 75% of the total market capitalization of all listed companies in the country. More than 4000 Companies are listed in BSE or Bombay Stock Exchange. Top 30 companies form together the premier index called SENSEX. In SENSEX different weights are allocated to each company. These companies represent all the major sectors of Indian economy.

2.4 Index

Index consists of group of shares. Index shows the direction of the entire market. Like when people say market is going up or down then that means index is going up or down. Index consists of high market capitalization and high liquidity shares. In Indian stock market two types of
indices are used Nifty for NSE and Sensex for BSE. Nifty consists of a group of 50 Shares. Sensex Consists group of more companies.

3. DATA MINING TECHNIQUES

Every day throughout the India from BOLT and private Computer Millions of Transaction perform for selling and purchasing for the share of listed companies at the NSE and BSE. When millions of transactions are there, there must have lots data to carried out analysis to find out the hidden pattern, relationships trends of various stocks individually or in group having relation with the other company shares which is possible using data mining technique.

Data mining is the techniques of extracting meaning full information from large and mostly unorganized data banks. It is the process of performing automated extraction and generating predictive information from large data banks. Data mining enable you to understand the current market stands and enables you to take proactive measure to gain maximum benefits to same. The extraction of meaning full information from large data bank is otherwise non as knowledge discovery (KDD). Data mining is the integration of various techniques from multiple disciplines such as static, machine learning, pattern recognizes, neural network, image processing & data base management system.

Figure 1: Knowledge Discovery Overview
The general phase on the data mining process to extract knowledge as below:

Problem definition, Creating a Data base for Data mining, Exploring database ,Preparation for creating a data mining model ,Building a data mining model ,Evaluating the data mining model, Deploying the data mining model.

Data mining techniques provide you with way to use various data mining task such as classification and clustering in order to predicates solution set for a problem. Some of the data mining techniques include

1. Static techniques Machine learning
2. Decision Trees
3. Hidden Marko model
4. Artificial neural Networks
5. Genetic Algorithms
6. Meta Learning

Data mining can be used in the field of finance, particularly for early determination of financial failure, determination of financial information manipulation and presupposition of bear and bull periods in the stock exchanges.