Study of Software Testing and Types of Software Test Design Techniques

1Nidhi Kandhil  nidhikandhil@gmail.com
2Vikas Chahar, Head, Department of Computer Science Vaish (P.G.) College, Rohtak

Abstract : Software Testing is the process of identifying the correctness and quality of software program. The purpose is to check whether the software satisfies the specific requirements, needs and expectations of the customer. In other words, testing is executing a system or application in order to find software bugs, defects or errors. Testing is the process of evaluating a system or its component(s) with the intent to find whether it satisfies the specified requirements or not. In simple words, testing is executing a system in order to identify any gaps, errors, or missing requirements in contrary to the actual requirements.

According to ANSI/IEEE 1059 standard, Testing can be defined as - A process of analyzing a software item to detect the differences between existing and required conditions (that is defects/errors/bugs) and to evaluate the features of the software item.

Key Words : Software Testing, black box, white box, walk through etc.

Types of Software Test Design Techniques
There are various types of designing techniques, each of which is suitable for identifying a particular type of error. Hence, the challenge lies in selecting the right set of relevant test design techniques for the particular application. Software test design techniques can be broadly classified into two major categories: static and dynamic techniques.

- Static Techniques.
- Dynamic Techniques.

Static Test Design Techniques:
Static testing refers to the testing of software manually or with the help of tools. Static testing is usually carried out during the early phase of software development life cycle. Static testing is useful for testing multiple aspects of a software, including source code, functional and requirement specifications, and design documents and models.

Static testing can be further divided into two categories based upon whether it is performed manually or with the help of tools.