

S.no.	On the basis of	Black Box testing	White Box testing
1.	<b>Basic</b>	It is a software testing technique that examines the functionality of software without knowing its internal structure or coding.	In white-box testing, the internal structure of the software is known to the tester.
2.	<b>Also known as</b>	Black Box Testing is also known as functional testing, data-driven testing, and closed-box testing.	It is also known as structural testing, clear box testing, code-based testing, and transparent testing.
3.	<b>Programming knowledge</b>	In black-box testing, there is less programming knowledge is required.	In white-box testing, there is a requirement of programming knowledge.
4.	<b>Algorithm testing</b>	It is not well suitable for algorithm testing.	It is well suitable and recommended for algorithm testing.
5.	<b>Usage</b>	It is done at higher levels of testing that are system testing and acceptance testing.	It is done at lower levels of testing that are unit testing and integration testing.
6.	<b>Automation</b>	It is hard to automate black-box testing due to the dependency of testers and programmers on each other.	It is easy to automate the white box testing.
7.	<b>Tested by</b>	It is mainly performed by the software testers.	It is mainly performed by developers.
8.	<b>Time-consuming</b>	It is less time-consuming. In Black box testing, time consumption depends upon the availability of the functional specifications.	It is more time-consuming. It takes a long time to design test cases due to lengthy code.
9.	<b>Base of testing</b>	The base of this testing is external expectations.	The base of this testing is coding which is responsible for internal working.

10.	<b>Exhaustive</b>	It is less exhaustive than White Box testing.	It is more exhaustive than Black Box testing.
11.	<b>Implementation knowledge</b>	In black-box testing, there is no implementation knowledge is required.	In white-box testing, there is a requirement of implementation knowledge.
12.	<b>Aim</b>	The main objective of implementing black box testing is to specify the business needs or the customer's requirements.	Its main objective is to check the code quality.
13.	<b>Defect detection</b>	In black-box testing, defects are identified once the code is ready.	Whereas, in white box testing, there is a possibility of early detection of defects.
14.	<b>Testing method</b>	It can be performed by trial and error technique.	It can test data domain and data boundaries in a better way.
15.	<b>Types</b>	Mainly, there are three types of black-box testing: <b>functional testing, Non-Functional testing, and Regression testing.</b>	The types of white box testing are – <b>Path testing, Loop testing, and Condition testing.</b>
16.	<b>Errors</b>	It does not find the errors related to the code.	In white-box testing, there is the detection of hidden errors. It also helps to optimize the code.