- ▶ There are 5 Levels of Testing
  - Unit Level Testing
  - \* Module Level Testing
  - \* Integration Level Testing
  - System Level Testing
  - User Acceptance Level Testing



- Unit Level Testing
- \* If one performs testing on a unit then that level of testing is known as unit level testing. It is white box testing usually developers perform it.
- □ Unit: -It is defined as a smallest part of an application.



- Module Level Testing
- \* If one perform testing on a module that is known as module level testing. It is black box testing usually test engineers perform it.



- Integration Level Testing
- \* Once the modules are developing the developers will develop some interfaces and integrate the module with the help of those interfaces while integration they will check whether the interfaces are working fine or not. It is a white box testing and usually developers or white box testers perform it.



- The developers will be integrating the modules in any one of the following approaches.
- ❖ Top Down Approach (TDA):
- ✓ In this approach the parent modules are developed first and then integrated with child modules.



- □ The developers will be integrating the modules in any one of the following approaches.
- Bottom-Up Approach (BUA):
- In this approach the child modules are developed first and the integrated that to the corresponding parent modules.



□ The developers will be integrating the modules in any one of the following approaches.

### Hybrid Approach :

This approach is a mixed approach of both Top down and Bottom up approaches.



□ The developers will be integrating the modules in any one of the following approaches.

#### Big Bang Approach:

Once all the modules are ready at a time integrating them finally is known as big bang approach.



- □ STUB: While integrating the modules in top down approach if at all any mandatory module is missing then that module is replace with a temporary program known as STUB.
- DRIVER: While integrating the modules in bottom up approach if at all any mandatory module is missing then that module is replace with a temporary program known as DRIVER.



- System Level Testing
- Once the application is deployed into the environment then if one performs testing on the system it is known as system level testing it is a black box testing and usually done by the test engineers.
- □ At this Level of Testing so many types of Testing are done.

#### Some of those are:

- ✓ System Integration Testing
- ✓ Load Testing
- ✓ Performance Testing
- ✓ Stress Testing....



- User Acceptance Level Testing
- The same system testing done in the presents of the user is known as user acceptance testing. It s a black box testing usually done by the Test engineers.

