**Maven introduction –part 2**

* Three steps process of a maven:

1. Default: it takes the code from developers and perform few functions.
2. Compile: compiles the entire source code.
3. Validate: validates the compiled code.
4. Test: tests the source code.
5. Package: generates the package for code.
6. Install: install all the packages generated by package.
7. Verify: it will verify the generated package.
8. Clean: performed before compilation. Clean means unnecessary things will be deleted.
9. Pre-clean: check for jar/var/ear file
10. Clean: delete the older ear/jar/war files.
11. Post clean: the new generated war/jar/ear files will be saved.
12. Site: it's like a folder where we will deploy our application.
13. Pre-site: it receives the post clean files.
14. Site: it receives the pre-site files.
15. Post-site: it receives the files from site.
16. Site-deploy: to where we need to copy the files.

* What are the fields present in the pom.xml?
* The pom.xml file in a maven project contains several important fields that define the project's configuration.

1. Group id:

* It means the unique identifier for the group or organization that is responsible for the project.
* client name or project.
* Example: axis, icici, and sbi.

1. Artifact id: feature name

* Features of group id.
* The unique identifier for the project itself.
* Example: personal loan, gold loan, debit card, and credit card and net banking.

1. Version:

* The version of the project.
* Ex:8.2.0
* Version consists of three fields:
* Major release: if 8 changes to 9 – project got released
* Minor release: if 2 changes to 3 – new feature is added.
* Hot fix/bug fix release: developers are still developing the code.
* Release:
* it is a final version of that build that which will not change.
* Only numerical values are present ex:8.2.0.
* Releases maintain version.
* Snapshot:
* It is under development version build compile/artifacts can change.
* It is identified by a version number that includes the suffix –SNAPSHOT.
* Example: 8.2.0-SNAPSHOT.
* Doesnot maintain any versions.
* Maven goals or commands:
* Mvn compile: compiles the source code of the project.
* Mvn test: runs the tests in the project using the testing framework specified in the pom.xml.
* Mvn package: packages the compile code into a distributed format, such as jar/var/ear.
* Mvn install: installs the packaged artifact into the local maven repo for use as a dependency in other projects.
* Mvn deploy: deploys the packaged artifact to a remote repository for Sharing with other developers.
* Mvn clean: cleans the project by removing the target directory, which contains compiled code and packaged artifacts.
* Mvn site: generates a site for the project, including project documentation.