Task 1:

What do you mean by GOOD Code and BAD CODE?

Good code is clean, readable, maintainable, and efficient. It is written in a way that other developers can easily understand, debug, test, and extend.

Bad code is hard to read, understand, debug, or maintain. Even if it works, it can lead to bugs, performance issues, or confusion for future developers.

Task 2:

What do you understand by databinding?

Data Binding is the process of connecting the data (model) of an application to the user interface (UI) so that any change in the data automatically updates the UI, and optionally, changes in the UI update the data.

Task 3:

What do you know about continuous development?

Continuous Development (CD) is a software engineering practice that refers to a set of automated processes that ensure code changes are built, tested, integrated, and delivered rapidly and reliably.

Task 4:

What are the conditions for polymorphism?

Polymorphism in Java (and other object-oriented languages) means "many forms" — the ability of a single interface or method to behave differently based on the object or context.

There are two main types of polymorphism in Java:

1. Compile-Time Polymorphism (Method Overloading)
2. Runtime Polymorphism (Method Overriding)

Task 05:

What is, why is it used , where is it used..

TDD and BDD approach..

TDD stands for Test-Driven Development. It is a software development approach where tests are written before writing the actual code.

BDD stands for Behavior-Driven Development. It's an extension of TDD that emphasizes writing tests in natural language to describe system behavior, often involving collaboration between developers, testers, and business stakeholders.

Task 06:

List down the Manual and automated testing tools

| **Tool Name** | **Purpose** |
| --- | --- |
| **TestLink** | Test case management (open-source) |
| **JIRA (with Zephyr)** | Bug tracking + manual test case management |
| **qTest** | Test management platform |
| **PractiTest** | End-to-end test case and issue tracking |
| **Xray (for Jira)** | Manual + automated test management |
| **TestRail** | Centralized test case management |
| **Bugzilla** | Defect tracking system |
| **MantisBT** | Lightweight bug tracking |
| **HP ALM / Quality Center** | Enterprise-level test management |

| **Tool** | **Language** |
| --- | --- |
| **JUnit** | Java |
| **TestNG** | Java |
| **NUnit** | .NET |
| **pytest** | Python |