

Describe what the ‘Pause’ button in eclipse does in the context of running programs.

In the context of running programs within, the ‘Pause’ button is used when we are debugging our code. When we press the ‘Pause’ button, the following actions occur:

1.Suspend Execution:

The currently running program is suspended, meaning it stops executing at the point where it is. This allows you to examine the current state of the program without it continuing to run.

2.View Program State:

When the program is paused, you can inspect variables, check the call stack, and evaluate expressions to understand what the program is doing at that particular moment. This is useful for identifying issues and understanding the program flow.

3.Breakpoints:

If breakpoints are set, the program will pause at the next breakpoint it encounters. However, using the ‘Pause’ button allows you to suspend the program at any point, not just at predefined breakpoints.

4.Resuming Execution:

After pausing, you can resume the execution of the program by using the ‘Resume’ button, which continues the program from where it was paused.

5.Step Commands:

While paused, you can use step command (Step Into, Step Over, Step return) to execute the program line by line or to step through the code methodically, which helps in detailed debugging.

