

## Deliverable 2: Debugging Report

### A. List of Errors, Line Numbers, and Effects

Error	Line Number	Effect
Incorrect calculation of stateTaxMA	81	stateTaxMA was not updating in Watch list because execution was paused before evaluating.
Use of Math.dmax instead of Math.max	83	Caused an Uncaught ReferenceError because Math.dmax is not a valid function.
Initial stateTaxMA value unavailable	81	stateTaxMA showed <not available> in Watch list because execution had not reached that point yet.
Breakpoints not triggering stateTaxMA update	81	Watch list was showing stateTaxableIncome instead of stateTaxMA because execution was paused before evaluating it.

### B. How Breakpoints and Call Stack Helped Identify Errors

1. Breakpoints helped pause execution at critical points, allowing inspection of variable values before and after calculations.
2. The Watch Panel showed unexpected behaviors, such as stateTaxMA being <not available>, indicating the debugger was pausing before it was assigned.
3. The Call Stack revealed the flow of function calls, confirming that calculateStateTax() was correctly invoked from the event handler.

4. By stepping through execution (F10 - Step Over), we confirmed how values were computed line-by-line, identifying the incorrect use of `Math.dmax` instead of `Math.max`.
5. Console Logging was used as an additional verification tool, confirming that `stateTaxMA` was properly computed after executing its assignment line.

### **C. Screenshots Attached**

- `SC_Del2_01.png`: Shows breakpoints, local variables, and call stack.
- `SC_Del2_02.png`: Highlights the incorrect function `Math.dmax` and the missing `stateTaxMA` value.
- `SC_Del2_03.png`: Displays correct tax calculations after debugging and fixing errors.