

Macro Programming

Using the Watch Window to Debug VBA Code

Sample VBA Code

Listing 1: Sample VBA macro to calculate sum

```
Sub CalculateSum()  
    Dim i As Integer  
    Dim total As Integer  
    total = 0  
  
    For i = 1 To 5  
        total = total + i  
    Next i  
  
    MsgBox "Total sum is " & total  
End Sub
```

Steps for Using the Watch Window

1. Open the VBA Editor with **Alt + F11**.
2. Open or create a module and paste the code.
3. Set a breakpoint on `total = total + i` by clicking the margin or pressing **F9**.
4. Run the macro (**F5**); execution pauses at the breakpoint.
5. Add a watch by right-clicking `total` or `i` and selecting **Add Watch**, or via **Debug > Add Watch**.
6. Type the variable name (e.g., `i`, `total`) in the Watch window.
7. Use **F8** to step through code and observe variable values updating in the Watch window.
8. Press **F5** to continue or **Shift + F5** to stop debugging.

Note

- Monitors values of selected variables or expressions.
- Updates values after each paused line, letting you trace execution state.
- Allows editing variable values to test scenarios.
- Complements breakpoints and step-through debugging.