Debugging Procedures

There are two techniques for debugging procedures in Igor:

- Using print statements
- Using the symbolic debugger

For most situations, the symbolic debugger is the most effective tool. In some cases, a strategically placed print statement is sufficient.

Debugging With Print Statements

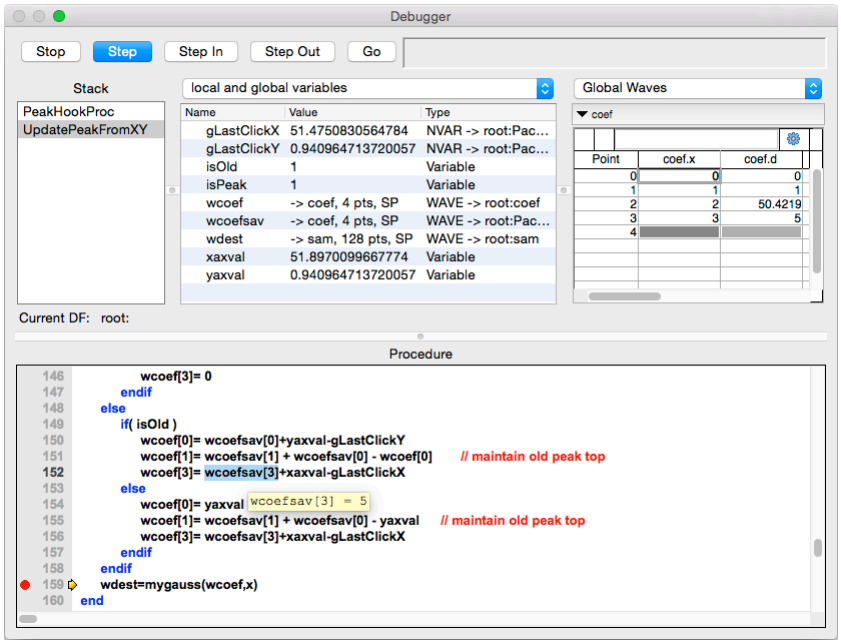
This technique involves putting print statements at a certain point in a procedure to display debugging messages in Igor's history area. In this example, we use Printf to display the value of parameters to a function and then Print to display the function result.

```
Function Test(w, num, str)
   Wave w
   Variable num
   String str

   Printf "Wave=%s, num=%g, str=%s\r", NameOfWave(w), num, str

   <body of function>

   Print result
   return result
End
```

See **Creating Formatted Text** on page IV-259 for details on the Printf operation.

The Debugger

When a procedure doesn't produce the results you want, you can use Igor's built-in debugger to observe the execution of macros and user-defined functions while single-stepping through the lines of code.



The debugger is normally disabled. Select Enable Debugger in either the Procedure menu or the contextual menu shown by control-clicking (Macintosh) or by right-clicking (Windows) in any procedure window.