

```
w = 123

    SetDataFolder root:
End

// String liberal NAME must NOT be quoted
Function DemoStringLiberalNames()
    SetDataFolder root:

        String dfName = "My Data Folder"           // String name must NOT be quoted
        NewDataFolder/O $dfName

        String wName = "My Wave"                  // String name must NOT be quoted
        Make/O root:$dfName:$wName

        Wave w = root:$dfName:$wName           // String name must NOT be quoted
        w = 123

    SetDataFolder root:
End
```

The last example illustrates another subtlety. This command would generate an error at compile time:

```
Make/O root:$dfName:$wName      // ERROR
```

because Igor would interpret it as:

```
Make/O root:$ (dfName:$wName)      // ERROR
```

To avoid this, you must use parentheses like this:

```
Make/O root:$ (dfName) :$wName      // OK
```

Runtime Lookup Example

In this example, a function named Routine calls another function named Subroutine and needs to access a number of result values created by Subroutine. To make it easy to clean up the temporary result globals, Subroutine creates them in a new data folder. Routine uses the results created by Subroutine and then deletes the temporary data folder.

```
Function Subroutine(w)
    WAVE w

    NewDataFolder/O/S SubroutineResults      // Results go here

    WaveStats/Q w                      // WaveStats creates local variables
    Variable/G gAvg = V_avg            // Return the V_avg result in global gAvg
    Variable/G gMin = V_min
    String/G gWName = NameOfWave(w)

    SetDataFolder ::                  // Back to original data folder
End

Function Routine()
    Make aWave= {1,2,3,4}
    Subroutine(aWave)

    DFREF dfr = :SubroutineResults

    NVAR theAvg = dfr:gAvg           // theAvg is local name
    NVAR theMin = dfr:gMin
    SVAR theName = dfr:gWName
    Print theAvg, theMin, theName
```