

```

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

```