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/*-----*
 * File Name: GetWorksheetSelection.c *
 * Creation: ER, 01/24/05 *
 * Purpose: Programming Example *
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 * *
 * Modification Log: *
 *-----*/

#include <Origin.h>

////////////////////////////////////
// This example shows how to get the range of cells that a user has selected
// on the active worksheet.
// Have a worksheet window active, make a range selection on the worksheet,
// and then call this function
//
void get_worksheet_selection()
{
    // Declare worksheet object with active layer
    Worksheet wks = Project.ActiveLayer();
    if( !wks )
    {
        out_str("Active layer is not a worksheet!");
        return;
    }
    int c1, c2, r1, r2;
    // Get worksheet selection
    int nSelType = wks.GetSelection(c1, c2, r1, r2);
    // If nothing was selected, return
    if( WKS_SEL_NONE == nSelType )
    {
        out_str("Nothing was selected in the worksheet!");
        return;
    }
    // Report selection
    printf("Selection: Row %d, Col %d to Row %d, Col %d\n", r1 + 1, c1 + 1, r2 + 1, c2 + 1);
    // Note: 1 was added to r1, c1 etc because Origin C uses 0-based offset and in the
    // GUI typically the count starts at 1.

    // One can then perform further processing on the selection
    // such as, for example:
    // Get the selected cells into a matrix object
    matrix mat;
    BOOL bRet = mat.CopyFrom(wks, r1, c1, r2, c2);
    // Report min, max, mean, and median
    printf("Min, max, mean and median of selection: %f, %f, %f, %f\n",
        mat.GetMin(), mat.GetMax(), mat.GetMean(), mat.GetMedian());
}
////////////////////////////////////

```