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/*
File: oval.cpp
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Synopsis: This program used * to print an oval.
*/

#include <iostream>
#include <cmath>
using namespace std;

int main()
{
    int noMidrow; // number of * in the middle row.
    int noab_blrow; // number of rows above and below the middle row.

    cout << "Enter size of the middle row: ";
    cin >> noMidrow;

    while (noMidrow < 3){
        cout << "Size of the middle row must be at least three." << endl;
        cout << "Enter size of the middle row again: ";
        cin >> noMidrow;}

    cout << "Enter number of rows: ";
    cin >> noab_blrow;

    while (noab_blrow < 0 || (noMidrow - 2 * noab_blrow) < 2){
        cout << "Invalid number of rows. " << endl;
        cout << "Enter number of rows again: ";
        cin >> noab_blrow;}

    cout << endl;

    int i(0),i1(0),i2(0);/* The loop variable for the loop before the
middle row                                i is for setting up the number of
row.                                     i1 is for setting up the number of space.
                                         i2 is for setting up the number of *.
                                         */

    int j(0); //The loop variable for the middle row.

    int k(0),k1(0),k2(0); /*The loop variable for the loop after the
middle row                                k is for setting up the number of row.
                                         k1 is for setting up the number of space.
                                         k2 is for setting up the number of *.
                                         */

    for (i = noab_blrow; i >= 1; i--){

        for (i1 = i; i1 >= 1; i1--){
            cout << " ";

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    }

    for (i2 = noMidrow - 2 * i; i2 >= 1; i2--){
        cout << "*";
    }
    cout << endl;
}

for (j = 1; j <= noMidrow; j++){
    cout << "*";}

cout << endl;

for (k = 1; k <= noab_blrow; k++){

    for (k1 = 1; k1 <= k; k1++){
        cout << " ";
    }

    for (k2 = 1; k2 <= noMidrow - 2 * k; k2++){
        cout << "*";
    }

    cout << endl;}

return 0;
}

```