```cpp
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#include <iostream>
using namespace std;

const int MAX_OPERATIONS = 100;
int operands1[MAX_OPERATIONS];
int results[MAX_OPERATIONS];

int multiplyUsingAddition(int a, int b) {
    int result = 0;
    for (int i = 0; i < b; ++i) {
        result += a;
    }
    return result;
}

void displayMainMenu() {
    cout << endl;
    cout << "<<<<<Main Menu>>>>>" << endl;
    cout << "============================" << endl;
    cout << "1. Perform Multiplication" << endl;
    cout << "2. Display Results" << endl;
    cout << "3. Quit" << endl;
    cout << "Enter your choice: ";
}

void performMultiplication(int& operationCount) {
    cout << "Enter the number of operands for multiplication: ";
    int numOperands;
    cin >> numOperands;

    if (numOperands <= 0 || numOperands > MAX_OPERATIONS) {
        cout << "Invalid number of operands. Please enter a number between 1
        return;
    }

    int result = 1;
    for (int i = 0; i < numOperands; ++i) {
        cout << "Enter operand " << i + 1 << ": ";
        int operand;
        cin >> operand;
        result = multiplyUsingAddition(result, operand);
    }

    operands1[operationCount] = numOperands;
    results[operationCount] = result;
    ++operationCount;
```

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50:     cout << endl;
51:     cout << "Multiplication performed successfully!" << endl;
52: }
53:
54: void displayResults(int operationCount) {
55:     cout << "Results of Mathematical Operations:" << endl;
56:     cout << "=====================================" << endl;
57:
58:     for (int i = 0; i < operationCount; ++i) {
59:         cout << "Operation " << i + 1 << ": " << results[i] << " (Operands:
60:     }
61: }
62:
63: int main() {
64:     int operationCount = 0;
65:     int choice;
66:
67:     do {
68:         displayMainMenu();
69:         cin >> choice;
70:
71:         switch (choice) {
72:             case 1:
73:                 performMultiplication(operationCount);
74:                 break;
75:             case 2:
76:                 displayResults(operationCount);
77:                 break;
78:             case 3:
79:                 cout << "Goodbye!" << endl;
80:                 break;
81:             default:
82:                 cout << "Invalid choice. Please enter a number between 1 and
83:         }
84:
85:     } while (choice != 3);
86:
87:     return 0;
88: }
89:
```