Maximum Difference in a Sequence

Given an array a[] with length len > 1, write a function to find the maximum difference between two elements a[j] - a[i] where j > i.

```
int max_diff_seq(int a[], int len)
```

Returns the maximum difference if len > 1, otherwise returns -1

Files We Give You: A makefile and a sample main program (maxdiff.cpp) to test your solution. The executable file created by a successful build will be named maxdiff.

File You Must Submit: Place your solution code in a file named solution.cpp. This will be the only file that you submit.

Examples

```
Input: a[] = {1, 1}, len = 2
Returns: 0
```

Explanation: 1 - 1 = 0.

Input: $a[] = \{1, 3\}, len = 2$

Returns: 2

Explanation: 3 - 1 = 2.

Input: $a[] = \{23, 5, 30, 2\}, len = 4$

Returns: 25

Explanation: 5 - 23 = -18, 30 - 23 = 7, 2 - 23 = -21, 30 - 5 = 25, 2 - 5 = -3, 2 - 30 = -28. Maximum difference is 25.

Input: $a[] = \{-7, 5, 15, -1, -50\}, len = 5$

Returns: 22

Explanation: 5 - -7 = 12, 15 - -7 = 22, -1 - -7 = 6, -50 - -7 = 43, 15 - 5 = 10, -1 - 5 = -6, -50 - 5 = -55, -1 - 15 = -16, -50 - 15 = -65, -50 - 1 = -51. Maximum difference is 25.

Input: a[] = {1, 4, 6, 7}, len = 4

Returns: 6

Explanation: 4 - 1 = 3, 6 - 1 = 5, 7 - 1 = 6, 6 - 4 = 2, 7 - 4 = 3, 7 - 6 = 1. Maximum difference is 6.

Input: $a[] = {5}$, len = 1

Returns: -1

Explanation: len is not greater than 1.