

C day51.c U X C day51.2.c U C day52.c U C day61.c U C day61 D ~

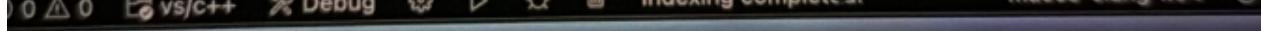
```
c++ > C day51.c > ...
1 #include <stdio.h>
2
3 // Function to find the first occurrence of target
4 int firstOccurrence(int nums[], int n, int target) {
5     int low = 0, high = n - 1, first = -1;
6     while (low <= high) {
7         int mid = (low + high) / 2;
8         if (nums[mid] == target) {
9             first = mid;
10            high = mid - 1; // keep searching in the left half
11        } else if (nums[mid] < target) {
12            low = mid + 1;
13        } else {
14            high = mid - 1;
15        }
16    }
17    return first;
18 }
19
20 // Function to find the last occurrence of target
21 int lastOccurrence(int nums[], int n, int target) {
22     int low = 0, high = n - 1, last = -1;
23     while (low <= high) {
24         int mid = (low + high) / 2;
25         if (nums[mid] == target) {
26             last = mid;
27             low = mid + 1; // keep searching in the right half
28         } else if (nums[mid] < target) {
29             low = mid + 1;
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS SPELL CHECKER

```
rishabhtrivedi/Documents/vs/c++/"day51
● rishabhtrivedi@Rishabhs-MacBook-Air vs % cd "/Users/rishabhtrivedi/Documents/vs/c++/" && gcc day51.c -o day51 && "/Users/rishabhtrivedi/Documents/vs/c++/"day51
Enter number of elements: 2
Enter 2 sorted elements: 23
23
Enter target element: 23
First occurrence index: 0
Last occurrence index: 1
○ rishabhtrivedi@Rishabhs-MacBook-Air c++ %
```

Visual Studio Code

macos-clang-x64



F7



F8



F9



F10



F11



F12

```
... day51.c U day51.2.c U day52.c U X day61.c U

c++ > C day52.c > ...
1 #include <stdio.h>
2
3 // Function to find the index of ceil of x in sorted array
4 int findCeil(int arr[], int n, int x) {
5     int low = 0, high = n - 1;
6     int ceilIndex = -1;
7
8     while (low <= high) {
9         int mid = (low + high) / 2;
10
11        if (arr[mid] == x) {
12            // If element equals x, it's the ceil
13            ceilIndex = mid;
14            // Move left to find the first occurrence
15            high = mid - 1;
16        }
17        else if (arr[mid] < x) {
18            // Move right if current element is smaller
19            low = mid + 1;
20        }
21        else {
22            // arr[mid] > x -> potential ceil
23            ceilIndex = mid;
24            // Move left to find smaller element still >= x
25            high = mid - 1;
26        }
27    }
28
29    return ceilIndex;
30 }
```

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS SPELL CHECKER

cd "/Users/rishabhtrivedi/Documents/vs/c++/" && gcc day52.c -o day52 && "/Users/rishabhtrivedi/Documents/vs/c++/"day52
rishabhtrivedi@Rishabhs-MacBook-Air vs % cd "/Users/rishabhtrivedi/Documents/vs/c++/" && gcc day52.c -o day52 && "/Users/rishabhtrivedi/Documents/vs/c++/"day52
Enter number of elements: 2
Enter 2 sorted elements: 3
23
Enter x: 2
0
rishabhtrivedi@Rishabhs-MacBook-Air c++ %
```



```
c++ > C day53.c > ...
1 #include <stdio.h>
2
3 int findPivotIndex(int arr[], int n) {
4     int totalSum = 0, leftSum = 0;
5
6     // Calculate total sum of array
7     for (int i = 0; i < n; i++) {
8         totalSum += arr[i];
9     }
10
11    // Traverse array to find pivot
12    for (int i = 0; i < n; i++) {
13        int rightSum = totalSum - leftSum - arr[i];
14
15        if (leftSum == rightSum) {
16            return i; // Pivot index found
17        }
18
19        leftSum += arr[i];
20    }
21
22    return -1; // No pivot index found
23 }
24
25 int main() {
26     int n;
27
28     printf("Enter number of elements: ");
29     scanf("%d", &n);

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS SPELL CHECKER

```
cd "/Users/rishabhtrivedi/Documents/vs/c++/" && gcc day53.c -o day53 && "/Users/rishabhtrivedi/Documents/vs/c++/"day53
● rishabhtrivedi@Rishabhs-MacBook-Air vs % cd "/Users/rishabhtrivedi/Documents/vs/c++/" && gcc day53.c -o day53 && "/Users/rishabhtrivedi/Documents/vs/c++/"day53
Enter number of elements: 2
Enter 2 elements: 23
2
-1
○ rishabhtrivedi@Rishabhs-MacBook-Air c++ % 2
```



```
... /69.c U C day70.c U C day53.c U C 53.2.c U C day54.c U X D v S Q E 03 00

c++ > C day54.c > ...
1 #include <stdio.h>
2 #include <math.h>
3
4 int main() {
5     int n;
6     printf("Enter a positive integer n: ");
7     scanf("%d", &n);
8
9     // Total sum of numbers from 1 to n
10    int totalSum = n * (n + 1) / 2;
11
12    // We want x such that (1 + 2 + ... + x) = (x + ... + n)
13    // i.e., x*(x + 1)/2 = totalSum - (x*(x - 1)/2)
14    // Simplifies to: x^2 = totalSum
15    int x = (int)sqrt(totalSum);
16
17    if (x * x == totalSum)
18        printf("%d\n", x);
19    else
20        printf("-1\n");
21
22    return 0;
23 }
24

60.c U
61.c U PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS SPELL CHECKER + ... | JavaSE-
62.c U
63.c U
64.c U
65.c U
66.c U
67.c U
68.c U
cd "/Users/rishabhtrivedi/Documents/vs/c++/" && gcc day54.c -o day54 && "/Users/rishabhtrivedi/Documents/vs/c++/"day54
rishabhtrivedi@Rishabhs-MacBook-Air vs % cd "/Users/rishabhtrivedi/Documents/vs/c++/" && gcc day54.c -o day54 && "/Users/rishabhtrivedi/Documents/vs/c++/"day54
Enter a positive integer n: 3
-1
rishabhtrivedi@Rishabhs-MacBook-Air c++ %

Indexing completed. macos-clang-x64 Prettier
```



```
47.c U day48.c U day57.c U day58.c U day59.c U X
c++ > C day59.c > ...
1 #include <stdio.h>
2
3 int main() {
4     int n, k;
5
6     printf("Enter number of elements: ");
7     scanf("%d", &n);
8
9     int arr[n];
10    printf("Enter %d elements: ", n);
11    for (int i = 0; i < n; i++) {
12        scanf("%d", &arr[i]);
13    }
14
15    printf("Enter window size k: ");
16    scanf("%d", &k);
17
18    if (k > n || k <= 0) {
19        printf("Invalid window size.\n");
20        return 0;
21    }
22
23    int windowSum = 0;
24    int maxSum;
25
26    // Calculate sum of first window
27    for (int i = 0; i < k; i++) {
28        windowSum += arr[i];
29    }
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS SPELL CHECKER

```
rishabhtrivedi/Documents/vs/c++/"day59
● rishabhtrivedi@Rishabhs-MacBook-Air vs % cd "/Users/rishabhtrivedi/Documents/vs/c++/" && gcc day59.c -o day59 && "/Users/rishabhtrivedi/Documents/vs/c++/"day59
Enter number of elements: 3
Enter 3 elements: 33
3
33
Enter window size k: 3
Maximum sum of subarrays of size 3: 69
rishabhtrivedi@Rishabhs-MacBook-Air c++ %
```

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← →

vs

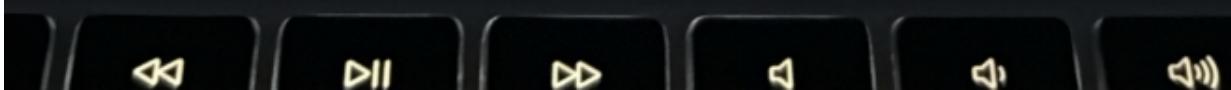


```
... 65.c U  C day66.c U  C day67.c U  C day68.c U  C day69.c U X D ...  
c++ > C day69.c > ...  
1 #include <stdio.h>  
2  
3 int main() {  
4     int n;  
5     printf("Enter size of array (n): ");  
6     scanf("%d", &n);  
7  
8     int arr[n];  
9     printf("Enter %d elements (one element is repeated):\n", n);  
10    for (int i = 0; i < n; i++) {  
11        scanf("%d", &arr[i]);  
12    }  
13  
14    int result = 0;  
15  
16    // XOR all array elements  
17    for (int i = 0; i < n; i++) {  
18        result ^= arr[i];  
19    }  
20  
21    // XOR with numbers from 1 to n-1 (since one is repeated)  
22    for (int i = 1; i <= n - 1; i++) {  
23        result ^= i;  
24    }  
25  
26    printf("Repeated element: %d\n", result);  
27    return 0;  
28 }  
29
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS SPELL CHECKER +

```
rishabhtrivedi/Documents/vs/c++/"day69
● rishabhtrivedi@Rishabhs-MacBook-Air vs % cd "/Users/rishabhtrivedi/Documents/vs/c++/" && gcc day69.c -o day69 && "/Users/rishabhtrivedi/Documents/vs/c++/"day69
Enter size of array (n): 3
Enter 3 elements (one element is repeated):
344
56
67
Repeated element: 288
○ rishabhtrivedi@Rishabhs-MacBook-Air c++ %
```

① 0 △ 0 ⚡ vs/c++ ✘ Debug ⚡ ⚡ ⚡ Indexing completed. macos-clang-x64





vs



66.c U

day67.c U

day68.c U

day69.c U

day70.c U X



```
c++ > C day70.c > ...
1 #include <stdio.h>
2 #include <ctype.h>
3
4 int main() {
5     char str[200];
6     int i;
7     int capitalize = 1; // Flag to mark where to capitalize
8
9     printf("Enter a string: ");
10    fgets(str, sizeof(str), stdin); // Read full line including spaces
11
12    for (i = 0; str[i] != '\0'; i++) {
13        if (capitalize && isalpha(str[i])) {
14            str[i] = toupper(str[i]);
15            capitalize = 0;
16        } else {
17            str[i] = tolower(str[i]);
18        }
19
20        if (str[i] == '.' || str[i] == '!' || str[i] == '?') {
21            capitalize = 1; // Next alphabet should be capital
22        }
23    }
24
25    printf("Sentence case: %s", str);
26    return 0;
27 }
28 }
```

PROBLEMS

OUTPUT

DEBUG CONSOLE

TERMINAL

PORTS

SPELL CHECKER

```
cd "/Users/rishabhtrivedi/Documents/vs/c++/" && gcc day70.c -o day70 && "/Users/rishabhtrivedi/Documents/vs/c++/"day70
```

- rishabhtrivedi@Rishabhs-MacBook-Air vs % cd "/Users/rishabhtrivedi/Documents/vs/c++/" && gcc day70.c -o day70 && "/Users/rishabhtrivedi/Documents/vs/c++/"day70
Enter a string: rishabh
Sentence case: Rishabh
- rishabhtrivedi@Rishabhs-MacBook-Air c++ %



Indexing completed.

macos-clang-x64

← →

vs



```

65.c U   C day66.c U   C day67.c U   C day68.c U   C day69.c U X   D ...
c++ > C day69.c > ...
1 #include <stdio.h>
2
3 int main() {
4     int n;
5     printf("Enter size of array (n): ");
6     scanf("%d", &n);
7
8     int arr[n];
9     printf("Enter %d elements (one element is repeated):\n", n);
10    for (int i = 0; i < n; i++) {
11        scanf("%d", &arr[i]);
12    }
13
14    int result = 0;
15
16    // XOR all array elements
17    for (int i = 0; i < n; i++) {
18        result ^= arr[i];
19    }
20
21    // XOR with numbers from 1 to n-1 (since one is repeated)
22    for (int i = 1; i <= n - 1; i++) {
23        result ^= i;
24    }
25
26    printf("Repeated element: %d\n", result);
27    return 0;
28 }
29

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS SPELL CHECKER +

rishabhtrivedi/Documents/vs/c++/"day69

- rishabhtrivedi@Rishabhs-MacBook-Air vs % cd "/Users/rishabhtrivedi/Documents/vs/c++/" && gcc day69.c -o day69 && "/Users/rishabhtrivedi/Documents/vs/c++/"day69

Enter size of array (n): 3

Enter 3 elements (one element is repeated):

344

56

67

Repeated element: 288

rishabhtrivedi@Rishabhs-MacBook-Air c++ %



```
c++ > C day68.c > ...
1 #include <stdio.h>
2
3 int main() {
4     int n, sum = 0, expectedSum;
5
6     printf("Enter the value of n: ");
7     scanf("%d", &n);
8
9     int arr[n];
10    printf("Enter %d elements (numbers from 0 to %d, with one missing): "
11
12    for (int i = 0; i < n; i++)
13        scanf("%d", &arr[i]);
14
15    // Calculate expected sum of 0 to n
16    expectedSum = n * (n + 1) / 2;
17
18    // Calculate actual sum of given elements
19    for (int i = 0; i < n; i++)
20        sum += arr[i];
21
22    printf("Missing number: %d\n", expectedSum - sum);
23
24    return 0;
25 }
26
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS SPELL CHECKER

```
cd "/Users/rishabhtrivedi/Documents/vs/c++/" && gcc day68.c -o day68 && "/Users/
rishabhtrivedi/Documents/vs/c++/"day68
● rishabhtrivedi@Rishabhs-MacBook-Air vs % cd "/Users/rishabhtrivedi/Documents/vs/
c++/" && gcc day68.c -o day68 && "/Users/rishabhtrivedi/Documents/vs/c++/"day68
Enter the value of n: 3
Enter 3 elements (numbers from 0 to 3, with one missing): 3
3
3
Missing number: -3
● rishabhtrivedi@Rishabhs-MacBook-Air c++ % 3
```

0 △ 0 vs/c++ ✘ Debug ⚙️ ⌂ ⌂ Indexing completed. macos-clang-



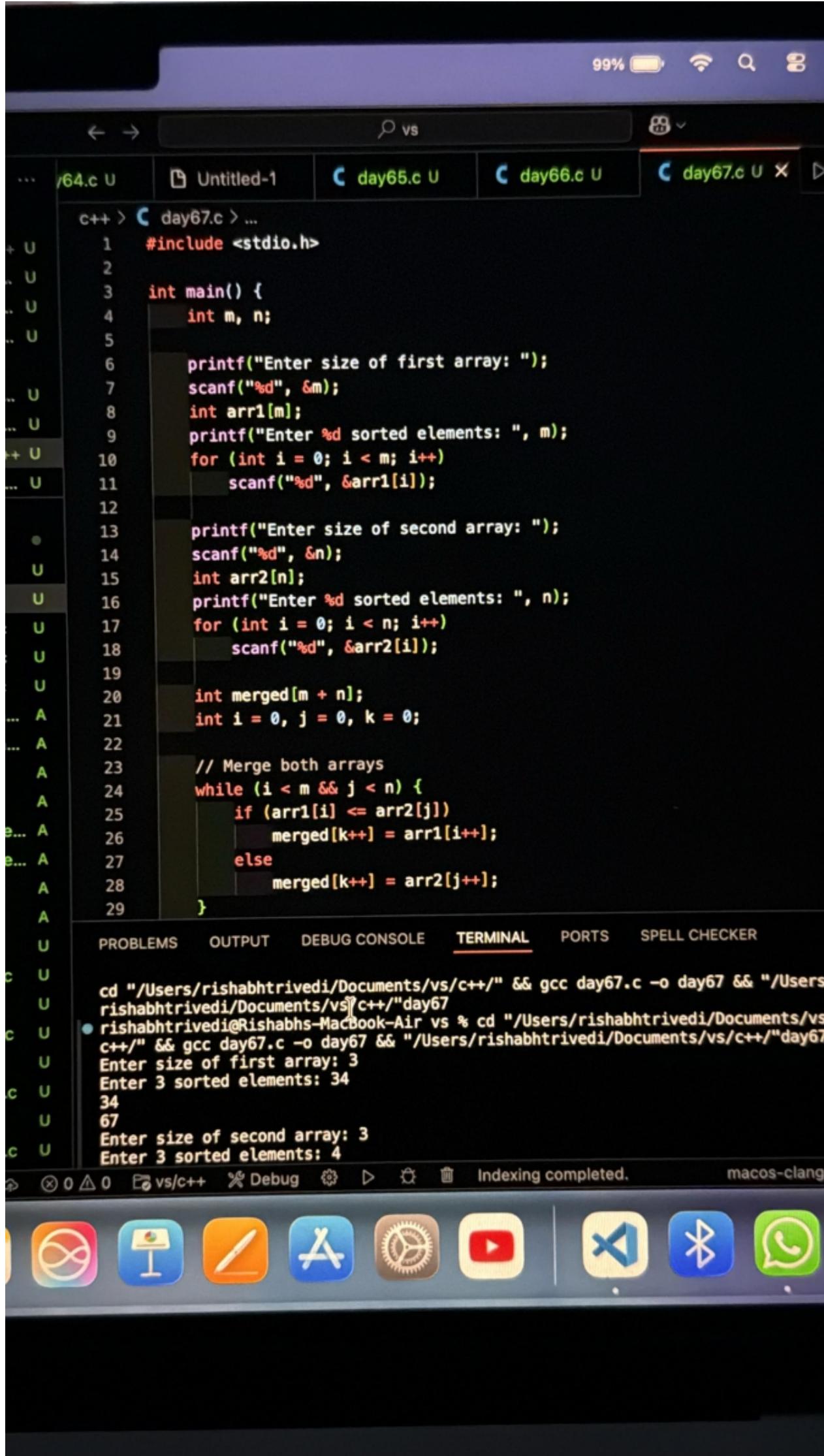
```
c++ > C day68.c > ...
1 #include <stdio.h>
2
3 int main() {
4     int n, sum = 0, expectedSum;
5
6     printf("Enter the value of n: ");
7     scanf("%d", &n);
8
9     int arr[n];
10    printf("Enter %d elements (numbers from 0 to %d, with one missing): "
11
12    for (int i = 0; i < n; i++)
13        scanf("%d", &arr[i]);
14
15    // Calculate expected sum of 0 to n
16    expectedSum = n * (n + 1) / 2;
17
18    // Calculate actual sum of given elements
19    for (int i = 0; i < n; i++)
20        sum += arr[i];
21
22    printf("Missing number: %d\n", expectedSum - sum);
23
24    return 0;
25 }
26
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS SPELL CHECKER

```
cd "/Users/rishabhtrivedi/Documents/vs/c++/" && gcc day68.c -o day68 && "/Users/
rishabhtrivedi/Documents/vs/c++/"day68
● rishabhtrivedi@Rishabhs-MacBook-Air vs % cd "/Users/rishabhtrivedi/Documents/vs/
c++/" && gcc day68.c -o day68 && "/Users/rishabhtrivedi/Documents/vs/c++/"day68
Enter the value of n: 3
Enter 3 elements (numbers from 0 to 3, with one missing): 3
3
3
Missing number: -3
● rishabhtrivedi@Rishabhs-MacBook-Air c++ % 3
```

0 △ 0 vs/c++ ✘ Debug ⚙️ ⌛ 🗑️ Indexing completed. macos-clang-





```
c++ > C day66.c > ...
1 #include <stdio.h>
2
3 int main() {
4     int n, target;
5     printf("Enter number of elements: ");
6     scanf("%d", &n);
7
8     int nums[n];
9     printf("Enter %d positive integers: ", n);
10    for (int i = 0; i < n; i++)
11        scanf("%d", &nums[i]);
12
13    printf("Enter target sum: ");
14    scanf("%d", &target);
15
16    int found = 0;
17
18    // Check all pairs
19    for (int i = 0; i < n - 1 && !found; i++) {
20        for (int j = i + 1; j < n; j++) {
21            if (nums[i] + nums[j] == target) {
22                printf("%d %d\n", i, j);
23                found = 1;
24                break;
25            }
26        }
27    }
28
29    if (!found)
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS SPELL CHECKER

```
cd "/Users/rishabhtrivedi/Documents/vs/c++/" && gcc day66.c -o day66 && "/Users/rishabhtrivedi/Documents/vs/c++/"day66
● rishabhtrivedi@Rishabhs-MacBook-Air vs % cd "/Users/rishabhtrivedi/Documents/vs/c++/" && gcc day66.c -o day66 && "/Users/rishabhtrivedi/Documents/vs/c++/"day66
Enter number of elements: 2
Enter 2 positive integers: 34
34
Enter target sum: 44
-1 -1
○ rishabhtrivedi@Rishabhs-MacBook-Air c++ %
```



```
c++ > C day66.c > ...
1 #include <stdio.h>
2
3 int main() {
4     int n, target;
5     printf("Enter number of elements: ");
6     scanf("%d", &n);
7
8     int nums[n];
9     printf("Enter %d positive integers: ", n);
10    for (int i = 0; i < n; i++)
11        scanf("%d", &nums[i]);
12
13    printf("Enter target sum: ");
14    scanf("%d", &target);
15
16    int found = 0;
17
18    // Check all pairs
19    for (int i = 0; i < n - 1 && !found; i++) {
20        for (int j = i + 1; j < n; j++) {
21            if (nums[i] + nums[j] == target) {
22                printf("%d %d\n", i, j);
23                found = 1;
24                break;
25            }
26        }
27    }
28
29    if (!found)
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS SPELL CHECKER

```
cd "/Users/rishabhtrivedi/Documents/vs/c++/" && gcc day66.c -o day66 && "/Users/rishabhtrivedi/Documents/vs/c++/"day66
● rishabhtrivedi@Rishabhs-MacBook-Air vs % cd "/Users/rishabhtrivedi/Documents/vs/c++/" && gcc day66.c -o day66 && "/Users/rishabhtrivedi/Documents/vs/c++/"day66
Enter number of elements: 2
Enter 2 positive integers: 34
34
Enter target sum: 44
-1 -1
○ rishabhtrivedi@Rishabhs-MacBook-Air c++ %
```



← → 🔎 vs

62.c U C day63.c U C day64.c U D Untitled-1 C day65.c U X ▶

```
c++ > C day65.c > ...
1 #include <stdio.h>
2 #include <string.h>
3
4 int main() {
5     char s[100], t[100];
6     int freq[26] = {0}; // To store frequency of each letter
7
8     printf("Enter first string: ");
9     scanf("%s", s);
10    printf("Enter second string: ");
11    scanf("%s", t);
12
13    // If lengths differ, they cannot be anagrams
14    if (strlen(s) != strlen(t)) {
15        printf("Not Anagram\n");
16        return 0;
17    }
18
19    // Count frequency for s
20    for (int i = 0; s[i] != '\0'; i++)
21        freq[s[i] - 'a']++;
22
23    // Subtract frequency for t
24    for (int i = 0; t[i] != '\0'; i++)
25        freq[t[i] - 'a']--;
26
27    // Check if all frequencies are zero
28    for (int i = 0; i < 26; i++) {
29        if (freq[i] != 0) {
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS SPELL CHECKER +

```
cd "/Users/rishabhtrivedi/Documents/vs/c++/" && gcc day65.c -o day65 && "/Users/
rishabhtrivedi/Documents/vs/c++/"day65
● rishabhtrivedi@Rishabhs-MacBook-Air vs % cd "/Users/rishabhtrivedi/Documents/vs/
c++/" && gcc day65.c -o day65 && "/Users/rishabhtrivedi/Documents/vs/c++/"day65
Enter first string: rt
Enter second string: ty
Not Anagram
○ rishabhtrivedi@Rishabhs-MacBook-Air c++ %
```



← → 🔎 vs

62.c U C day63.c U C day64.c U D Untitled-1 C day65.c U X ▶

```
c++ > C day65.c > ...
1 #include <stdio.h>
2 #include <string.h>
3
4 int main() {
5     char s[100], t[100];
6     int freq[26] = {0}; // To store frequency of each letter
7
8     printf("Enter first string: ");
9     scanf("%s", s);
10    printf("Enter second string: ");
11    scanf("%s", t);
12
13    // If lengths differ, they cannot be anagrams
14    if (strlen(s) != strlen(t)) {
15        printf("Not Anagram\n");
16        return 0;
17    }
18
19    // Count frequency for s
20    for (int i = 0; s[i] != '\0'; i++)
21        freq[s[i] - 'a']++;
22
23    // Subtract frequency for t
24    for (int i = 0; t[i] != '\0'; i++)
25        freq[t[i] - 'a']--;
26
27    // Check if all frequencies are zero
28    for (int i = 0; i < 26; i++) {
29        if (freq[i] != 0) {
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS SPELL CHECKER +

```
cd "/Users/rishabhtrivedi/Documents/vs/c++/" && gcc day65.c -o day65 && "/Users/rishabhtrivedi/Documents/vs/c++/"day65
● rishabhtrivedi@Rishabhs-MacBook-Air vs % cd "/Users/rishabhtrivedi/Documents/vs/c++/" && gcc day65.c -o day65 && "/Users/rishabhtrivedi/Documents/vs/c++/"day65
Enter first string: rt
Enter second string: ty
Not Anagram
○ rishabhtrivedi@Rishabhs-MacBook-Air c++ %
```

Indexing completed. macos-clang-x64

c++ > C day64.c > ...

```

1 #include <stdio.h>
2 #include <string.h>
3
4 int main() {
5     char s[100];
6     int lastIndex[256]; // Stores last index of each character
7     int maxLen = 0, start = 0;
8
9     printf("Enter a string: ");
10    scanf("%s", s);
11
12    int n = strlen(s);
13
14    // Initialize all characters as not seen (-1)
15    for (int i = 0; i < 256; i++)
16        lastIndex[i] = -1;
17
18    for (int end = 0; end < n; end++) {
19        // If character is already seen, move start
20        if (lastIndex[(unsigned char)s[end]] >= start)
21            start = lastIndex[(unsigned char)s[end]] + 1;
22
23        // Update last seen index of current character
24        lastIndex[(unsigned char)s[end]] = end;
25
26        // Calculate current window length and update max
27        if (end - start + 1 > maxLen)
28            maxLen = end - start + 1;
29    }

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS SPELL CHECKER + ⌂ ... |

```

cd "/Users/rishabhtrivedi/Documents/vs/c++/" && gcc day64.c -o day64 && "/Users/
rishabhtrivedi/Documents/vs/c++/"day64
● rishabhtrivedi@Rishabhs-MacBook-Air vs % cd "/Users/rishabhtrivedi/Documents/vs/
c++/" && gcc day64.c -o day64 && "/Users/rishabhtrivedi/Documents/vs/c++/"day64
Enter a string: rtishabh
Length of longest substring without repeating characters: 7
○ rishabhtrivedi@Rishabhs-MacBook-Air c++ * █

```



c++ > C day64.c > ...

```

1 #include <stdio.h>
2 #include <string.h>
3
4 int main() {
5     char s[100];
6     int lastIndex[256]; // Stores last index of each character
7     int maxLen = 0, start = 0;
8
9     printf("Enter a string: ");
10    scanf("%s", s);
11
12    int n = strlen(s);
13
14    // Initialize all characters as not seen (-1)
15    for (int i = 0; i < 256; i++)
16        lastIndex[i] = -1;
17
18    for (int end = 0; end < n; end++) {
19        // If character is already seen, move start
20        if (lastIndex[(unsigned char)s[end]] >= start)
21            start = lastIndex[(unsigned char)s[end]] + 1;
22
23        // Update last seen index of current character
24        lastIndex[(unsigned char)s[end]] = end;
25
26        // Calculate current window length and update max
27        if (end - start + 1 > maxLen)
28            maxLen = end - start + 1;
29    }

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS SPELL CHECKER

```

cd "/Users/rishabhtrivedi/Documents/vs/c++/" && gcc day64.c -o day64 && "/Users/
rishabhtrivedi/Documents/vs/c++/"day64
● rishabhtrivedi@Rishabhs-MacBook-Air vs % cd "/Users/rishabhtrivedi/Documents/vs/
c++/" && gcc day64.c -o day64 && "/Users/rishabhtrivedi/Documents/vs/c++/"day64
Enter a string: rtishabh
Length of longest substring without repeating characters: 7
○ rishabhtrivedi@Rishabhs-MacBook-Air c++ %

```

0 △ 0 vs/c++ ✘ Debug ⚙️ ⌂ Indexing completed. macos-clang-x64 ⚙️ Pret



vs



00

C day61.c U

C day62.c U

C day63.c U X

C day64.c U

Untitled D

```
c++ > C day63.c > ...
1 #include <stdio.h>
2
3 void sortArray(int arr[], int n) {
4     int temp;
5     for (int i = 0; i < n - 1; i++) {
6         for (int j = i + 1; j < n; j++) {
7             if (arr[i] > arr[j]) {
8                 temp = arr[i];
9                 arr[i] = arr[j];
10                arr[j] = temp;
11            }
12        }
13    }
14 }
15
16 int main() {
17     int n, k;
18
19     printf("Enter number of elements: ");
20     scanf("%d", &n);
21
22     int arr[n];
23     printf("Enter %d elements: ", n);
24     for (int i = 0; i < n; i++)
25         scanf("%d", &arr[i]);
26
27     printf("Enter the value of k: ");
28     scanf("%d", &k);
29 }
```

PROBLEMS

OUTPUT

DEBUG CONSOLE

TERMINAL

PORTS

SPELL CHECKER

+

```
cd "/Users/rishabhtrivedi/Documents/vs/c++/" && gcc day63.c -o day63 && "/Users/rishabhtrivedi/Documents/vs/c++/" day63
● rishabhtrivedi@Rishabhs-MacBook-Air vs % cd "/Users/rishabhtrivedi/Documents/vs/c++/" && gcc day63.c -o day63 && "/Users/rishabhtrivedi/Documents/vs/c++/" day63
Enter number of elements: 2
Enter 2 elements: 34
34
Enter the value of k: 5
Invalid value of k!
○ rishabhtrivedi@Rishabhs-MacBook-Air c++ %
```

0 0 △ 0

vs/c++

* Debug



Indexing completed.

macos-clang-x64



```
c++ > C day63.c > ...
1 #include <stdio.h>
2
3 void sortArray(int arr[], int n) {
4     int temp;
5     for (int i = 0; i < n - 1; i++) {
6         for (int j = i + 1; j < n; j++) {
7             if (arr[i] > arr[j]) {
8                 temp = arr[i];
9                 arr[i] = arr[j];
10                arr[j] = temp;
11            }
12        }
13    }
14 }
15
16 int main() {
17     int n, k;
18
19     printf("Enter number of elements: ");
20     scanf("%d", &n);
21
22     int arr[n];
23     printf("Enter %d elements: ", n);
24     for (int i = 0; i < n; i++)
25         scanf("%d", &arr[i]);
26
27     printf("Enter the value of k: ");
28     scanf("%d", &k);
```

```
cd "/Users/rishabhtrivedi/Documents/vs/c++/" && gcc day63.c -o day63 && "/Users/rishabhtrivedi/Documents/vs/c++/"day63
```

- rishabhtrivedi@Rishabhs-MacBook-Air ~ % cd "/Users/rishabhtrivedi/Documents/vs/c++/" && gcc day63.c -o day63 && "/Users/rishabhtrivedi/Documents/vs/c++/"day63

```
Enter number of elements: 2  
Enter 2 elements: 34
```

Enter 2 elements: 34
34

34

Enter the value of k: 5
Invalid value of k!

Invalid value of K!

rishabhtrivedi@Rish

○ rishabhtrivedi@Rishabhs-MacBook-Air c++ %

0 vs/c++ Debug

1

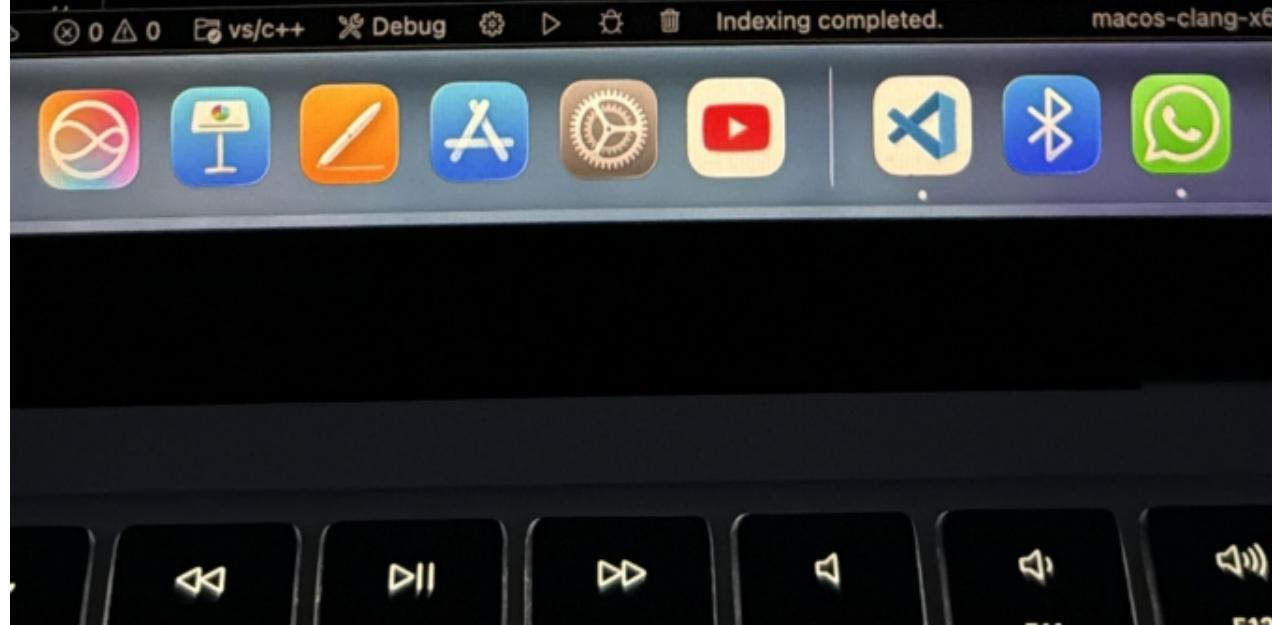
2023

○ rishabhtrivedi@Rishabhs-MacBook-Air c++ %

```
c++ > C day62.c > ...
1 #include <stdio.h>
2
3 int main() {
4     int n;
5     printf("Enter number of elements: ");
6     scanf("%d", &n);
7
8     int arr[n];
9     printf("Enter %d elements: ", n);
10    for (int i = 0; i < n; i++)
11        scanf("%d", &arr[i]);
12
13    int max_sum = arr[0];
14    int current_sum = arr[0];
15
16    for (int i = 1; i < n; i++) {
17        // Either start new subarray at arr[i] or continue the previous one
18        if (current_sum + arr[i] > arr[i])
19            current_sum += arr[i];
20        else
21            current_sum = arr[i];
22
23        if (current_sum > max_sum)
24            max_sum = current_sum;
25    }
26
27    printf("Maximum subarray sum = %d\n", max_sum);
28    return 0;
29 }
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS SPELL CHECKER

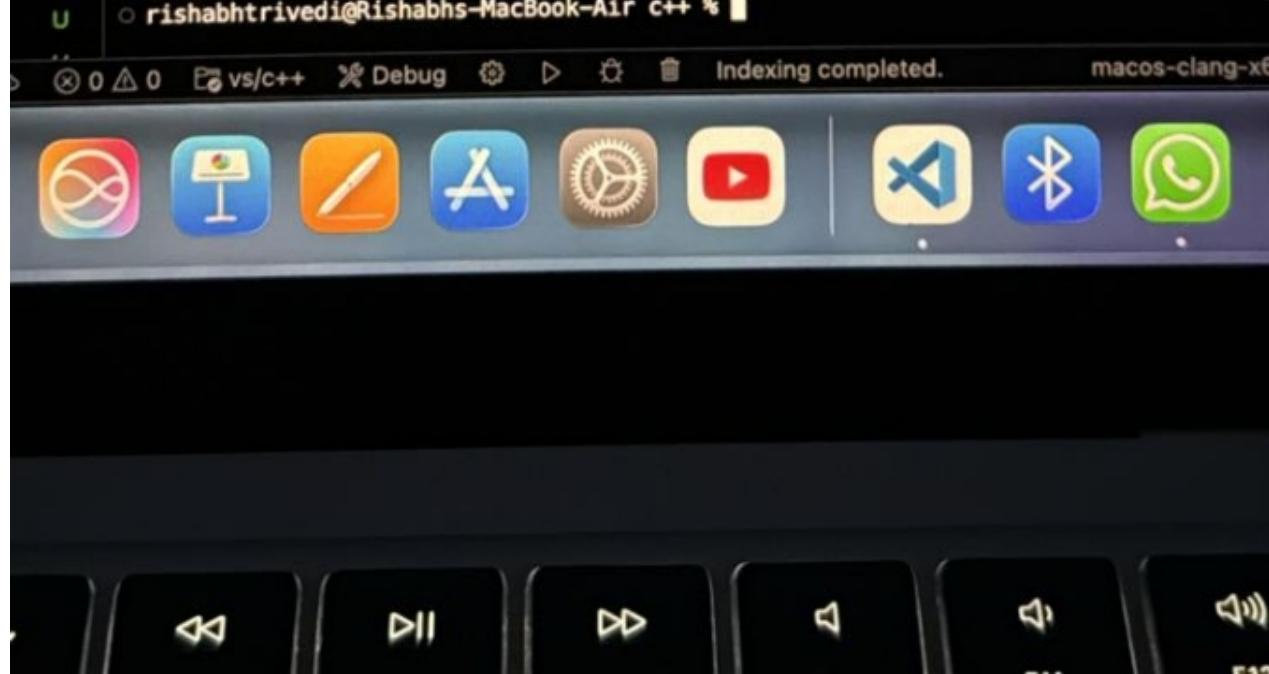
```
cd "/Users/rishabhtrivedi/Documents/vs/c++/" && gcc day62.c -o day62 && "/Users/rishabhtrivedi/Documents/vs/c++/day62"
● rishabhtrivedi@Rishabhs-MacBook-Air vs % cd "/Users/rishabhtrivedi/Documents/vs/c++/" && gcc day62.c -o day62 && "/Users/rishabhtrivedi/Documents/vs/c++/day62"
Enter number of elements: 2
Enter 2 elements: 45
45
Maximum subarray sum = 90
○ rishabhtrivedi@Rishabhs-MacBook-Air c++ %
```



```
c++ > C day62.c > ...
1 #include <stdio.h>
2
3 int main() {
4     int n;
5     printf("Enter number of elements: ");
6     scanf("%d", &n);
7
8     int arr[n];
9     printf("Enter %d elements: ", n);
10    for (int i = 0; i < n; i++)
11        scanf("%d", &arr[i]);
12
13    int max_sum = arr[0];
14    int current_sum = arr[0];
15
16    for (int i = 1; i < n; i++) {
17        // Either start new subarray at arr[i] or continue the previous one
18        if (current_sum + arr[i] > arr[i])
19            current_sum += arr[i];
20        else
21            current_sum = arr[i];
22
23        if (current_sum > max_sum)
24            max_sum = current_sum;
25    }
26
27    printf("Maximum subarray sum = %d\n", max_sum);
28    return 0;
29 }
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS SPELL CHECKER

```
cd "/Users/rishabhtrivedi/Documents/vs/c++/" && gcc day62.c -o day62 && "/Users/rishabhtrivedi/Documents/vs/c++/"day62
● rishabhtrivedi@Rishabhs-MacBook-Air vs % cd "/Users/rishabhtrivedi/Documents/vs/c++/" && gcc day62.c -o day62 && "/Users/rishabhtrivedi/Documents/vs/c++/"day62
Enter number of elements: 2
Enter 2 elements: 45
45
Maximum subarray sum = 90
○ rishabhtrivedi@Rishabhs-MacBook-Air c++ %
```



```
← → ⌂ vs ... C day61.c U X C day62.c U C day63.c U C day64.c U ⌂ Untitled ▶ ...  
c++ > C day61.c > ...  
1 #include <stdio.h>  
2  
3 int main() {  
4     int n, k;  
5  
6     printf("Enter number of elements: ");  
7     scanf("%d", &n);  
8  
9     int arr[n];  
10    printf("Enter %d elements: ", n);  
11    for (int i = 0; i < n; i++) {  
12        scanf("%d", &arr[i]);  
13    }  
14  
15    printf("Enter window size k: ");  
16    scanf("%d", &k);  
17  
18    if (k > n || k <= 0) {  
19        printf("Invalid window size.\n");  
20        return 0;  
21    }  
22  
23    printf("First negative integer in each subarray of size %d:\n", k);  
24  
25    // Loop through each window  
26    for (int i = 0; i <= n - k; i++) {  
27        int firstNegative = 0; // default is 0 (if no negative)  
28  
29        // Traverse the current window
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS SPELL CHECKER +

rishabhtrivedi/Documents/vs/c++/"day61
● rishabhtrivedi@Rishabhs-MacBook-Air vs % cd "/Users/rishabhtrivedi/Documents/vs/c++/" && gcc day61.c -o day61 && "/Users/rishabhtrivedi/Documents/vs/c++/"day61
Enter number of elements: 2
Enter 2 elements: 2
23
Enter window size k: 2
First negative integer in each subarray of size 2:
0

Indexing completed. macos-clang-x64



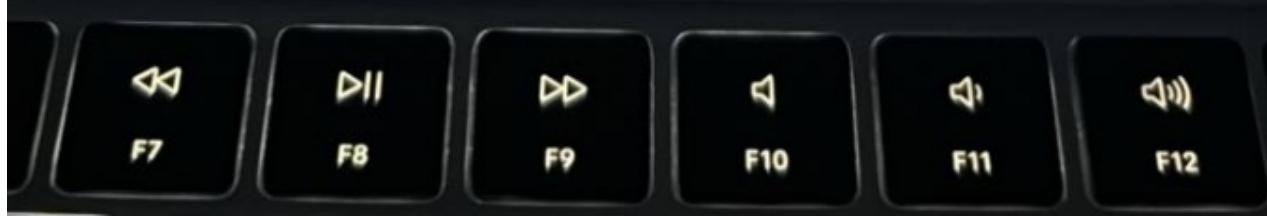
```
← → ⌂ vs ... C day61.c U X C day62.c U C day63.c U C day64.c U ⌂ Untitled ▶ ...  
c++ > C day61.c > ...  
1 #include <stdio.h>  
2  
3 int main() {  
4     int n, k;  
5  
6     printf("Enter number of elements: ");  
7     scanf("%d", &n);  
8  
9     int arr[n];  
10    printf("Enter %d elements: ", n);  
11    for (int i = 0; i < n; i++) {  
12        scanf("%d", &arr[i]);  
13    }  
14  
15    printf("Enter window size k: ");  
16    scanf("%d", &k);  
17  
18    if (k > n || k <= 0) {  
19        printf("Invalid window size.\n");  
20        return 0;  
21    }  
22  
23    printf("First negative integer in each subarray of size %d:\n", k);  
24  
25    // Loop through each window  
26    for (int i = 0; i <= n - k; i++) {  
27        int firstNegative = 0; // default is 0 (if no negative)  
28  
29        // Traverse the current window
```

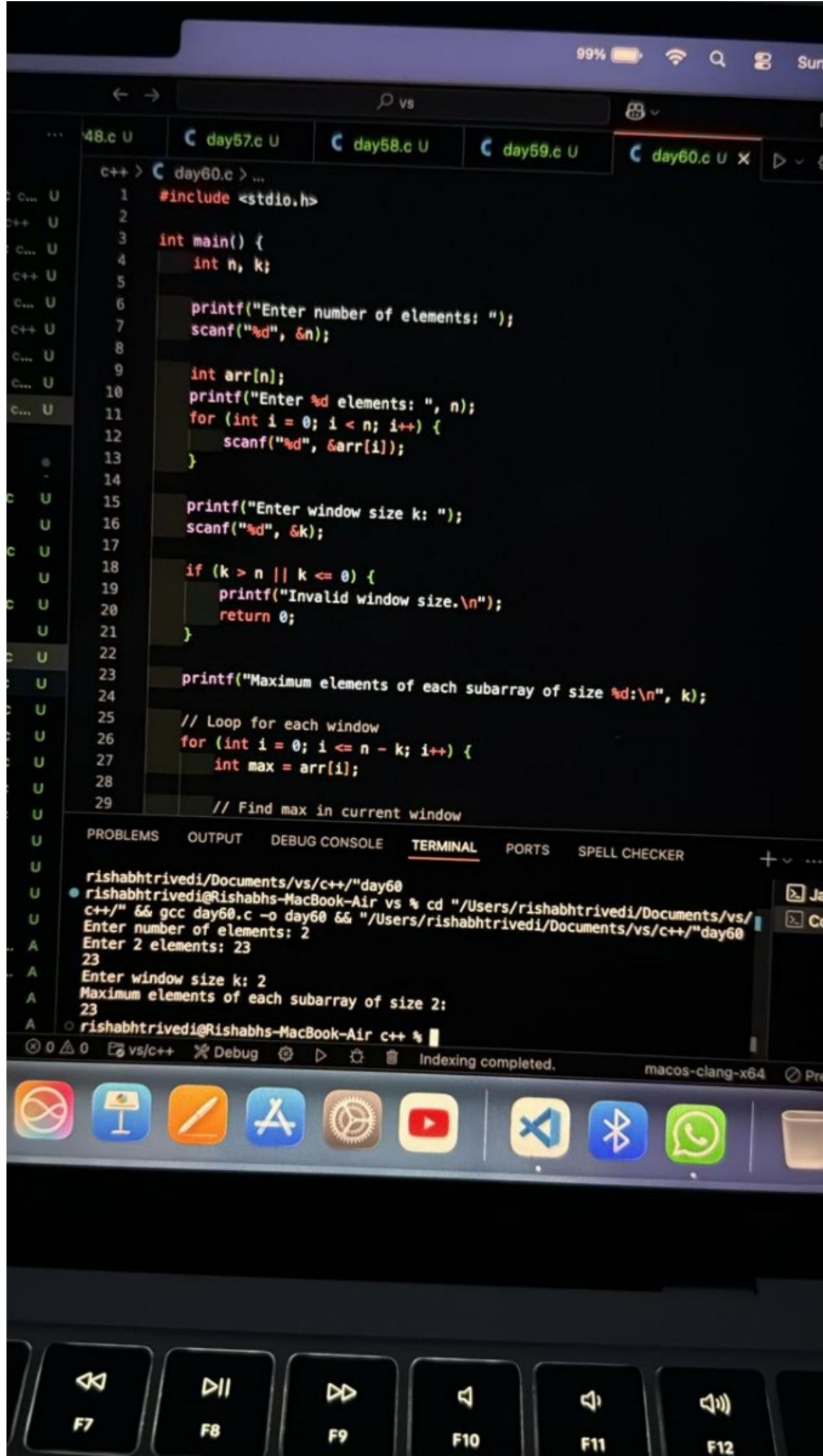
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS SPELL CHECKER +

rishabhtrivedi/Documents/vs/c++/"day61
● rishabhtrivedi@Rishabhs-MacBook-Air vs % cd "/Users/rishabhtrivedi/Documents/vs/c++/" && gcc day61.c -o day61 && "/Users/rishabhtrivedi/Documents/vs/c++/"day61
Enter number of elements: 2
Enter 2 elements: 2
23
Enter window size k: 2
First negative integer in each subarray of size 2:
0

○ rishabhtrivedi@Rishabhs-MacBook-Air c++ %

0 0 △ 0 vs/c++ Debug Indexing completed. macos-clang-x64





The screenshot shows a Visual Studio Code interface with the following details:

- Code Editor:** The main area displays a C++ program named `day60.c`. The code reads user input for the number of elements and a window size, then finds the maximum element in each subarray of size `k`.
- Terminal:** Below the editor, the terminal window shows the execution of the program. It prompts for the number of elements (2), the window size (2), and then prints the result: "Maximum elements of each subarray of size 2: 23".
- Status Bar:** At the bottom, the status bar shows "Indexing completed".



```
47.c U day48.c U day57.c U day58.c U day59.c U X
c++ > C day59.c ...
1 #include <stdio.h>
2
3 int main() {
4     int n, k;
5
6     printf("Enter number of elements: ");
7     scanf("%d", &n);
8
9     int arr[n];
10    printf("Enter %d elements: ", n);
11    for (int i = 0; i < n; i++) {
12        scanf("%d", &arr[i]);
13    }
14
15    printf("Enter window size k: ");
16    scanf("%d", &k);
17
18    if (k > n || k <= 0) {
19        printf("Invalid window size.\n");
20        return 0;
21    }
22
23    int windowSum = 0;
24    int maxSum;
25
26    // Calculate sum of first window
27    for (int i = 0; i < k; i++) {
28        windowSum += arr[i];
29    }
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS SPELL CHECKER

```
rishabhtrivedi/Documents/vs/c++/"day59
● rishabhtrivedi@Rishabhs-MacBook-Air vs % cd "/Users/rishabhtrivedi/Documents/vs/c++/" && gcc day59.c -o day59 && "/Users/rishabhtrivedi/Documents/vs/c++/"day59
Enter number of elements: 3
Enter 3 elements: 33
3
33
Enter window size k: 3
Maximum sum of subarrays of size 3: 69
rishabhtrivedi@Rishabhs-MacBook-Air c++ %
```

Indexing completed. macos-clang-



← →

🔍 vs



02

... /46.c U C day47.c U C day48.c U C day57.c U C day58.c U X D ⌂ ⌂

```
c++ > C day58.c > ...
1 #include <stdio.h>
2
3 int main() {
4     int n;
5
6     printf("Enter number of elements: ");
7     scanf("%d", &n);
8
9     int nums[n];
10    printf("Enter %d elements: ", n);
11    for (int i = 0; i < n; i++) {
12        scanf("%d", &nums[i]);
13    }
14
15    int answer[n];
16    int prefix[n], suffix[n];
17
18    // Compute prefix products
19    prefix[0] = 1;
20    for (int i = 1; i < n; i++) {
21        prefix[i] = prefix[i - 1] * nums[i - 1];
22    }
23
24    // Compute suffix products
25    suffix[n - 1] = 1;
26    for (int i = n - 2; i >= 0; i--) {
27        suffix[i] = suffix[i + 1] * nums[i + 1];
28    }
29
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS SPELL CHECKER +

```
cd "/Users/rishabhtrivedi/Documents/vs/c++/" && gcc day58.c -o day58 && "/Users/rishabhtrivedi/Documents/vs/c++/"day58
● rishabhtrivedi@Rishabhs-MacBook-Air vs % cd "/Users/rishabhtrivedi/Documents/vs/c++/" && gcc day58.c -o day58 && "/Users/rishabhtrivedi/Documents/vs/c++/"day58
Enter number of elements: 2
Enter 2 elements: 23
33
Answer array: 33, 23
○ rishabhtrivedi@Rishabhs-MacBook-Air c++ %
```

⊖ 0 ▲ 0 ⏪ vs/c++ ⏴ Debug ⏵ ⏶ ⏷ ⏸ Indexing completed. macos-clang-x64



← →

🔍 vs



08

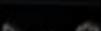
/46.c U

C day47.c U

C day48.c U

C day57.c U

C day58.c U X



```
c++ > C day58.c > ...
1 #include <stdio.h>
2
3 int main() {
4     int n;
5
6     printf("Enter number of elements: ");
7     scanf("%d", &n);
8
9     int nums[n];
10    printf("Enter %d elements: ", n);
11    for (int i = 0; i < n; i++) {
12        scanf("%d", &nums[i]);
13    }
14
15    int answer[n];
16    int prefix[n], suffix[n];
17
18    // Compute prefix products
19    prefix[0] = 1;
20    for (int i = 1; i < n; i++) {
21        prefix[i] = prefix[i - 1] * nums[i - 1];
22    }
23
24    // Compute suffix products
25    suffix[n - 1] = 1;
26    for (int i = n - 2; i >= 0; i--) {
27        suffix[i] = suffix[i + 1] * nums[i + 1];
28    }
29
```

PROBLEMS

OUTPUT

DEBUG CONSOLE

TERMINAL

PORTS

SPELL CHECKER



```
cd "/Users/rishabhtrivedi/Documents/vs/c++/" && gcc day58.c -o day58 && "/Users/rishabhtrivedi/Documents/vs/c++/"day58
● rishabhtrivedi@Rishabhs-MacBook-Air vs % cd "/Users/rishabhtrivedi/Documents/vs/c++/" && gcc day58.c -o day58 && "/Users/rishabhtrivedi/Documents/vs/c++/"day58
Enter number of elements: 2
Enter 2 elements: 23
33
Answer array: 33, 23
○ rishabhtrivedi@Rishabhs-MacBook-Air c++ %
```



macos-clang-x64



... .2.c U C day46.c U C day47.c U C day48.c U C day57.c U X D

```
c++ > C day57.c > ...
1 #include <stdio.h>
2
3 int main() {
4     int n;
5
6     printf("Enter number of elements: ");
7     scanf("%d", &n);
8
9     int arr[n];
10    printf("Enter %d elements: ", n);
11    for (int i = 0; i < n; i++) {
12        scanf("%d", &arr[i]);
13    }
14
15    printf("Previous Greater Elements: ");
16    for (int i = 0; i < n; i++) {
17        int prevGreater = -1; // Default if none found
18
19        // Check all elements to the left of arr[i]
20        for (int j = i - 1; j >= 0; j--) {
21            if (arr[j] > arr[i]) {
22                prevGreater = arr[j];
23                break; // nearest greater found
24            }
25        }
26
27        // Print result
28        printf("%d", prevGreater);
29
```

.c U PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS SPELL CHECKER

a... A cd "/Users/rishabhtrivedi/Documents/vs/c++/" && gcc day57.c -o day57 && "/Users/rishabhtrivedi/Documents/vs/c++/"day57

a... A rishabhtrivedi@Rishabhs-MacBook-Air vs % cd "/Users/rishabhtrivedi/Documents/vs/c++/" && gcc day57.c -o day57 && "/Users/rishabhtrivedi/Documents/vs/c++/"day57

A Enter number of elements: 2

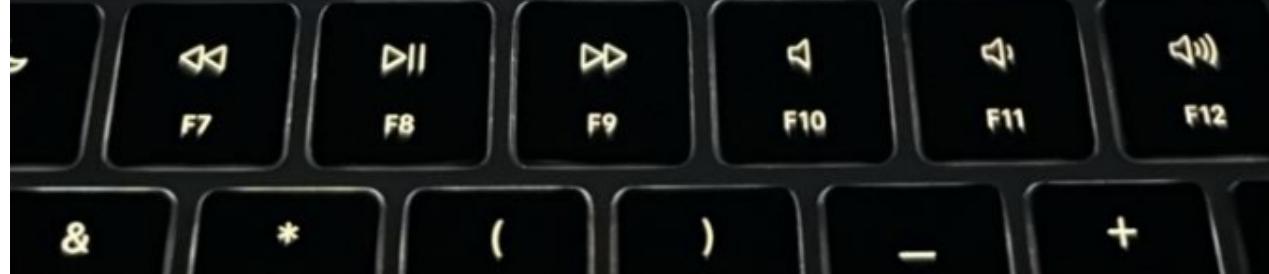
A Enter 2 elements: 34

34

file... A Previous Greater Elements: -1, -1

file... A rishabhtrivedi@Rishabhs-MacBook-Air c++ %

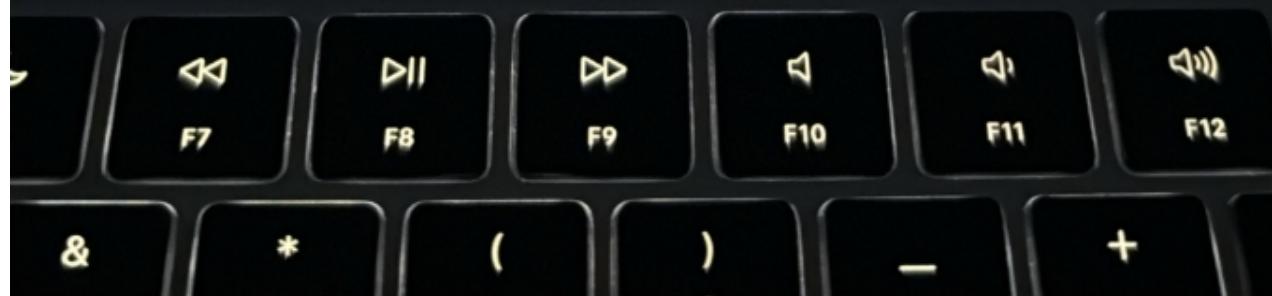
Indexing completed. macos-clang-x64



```
... .2.c U | C day46.c U | C day47.c U | C day48.c U | C day57.c U X D ▾
c++ > C day57.c > ...
1 #include <stdio.h>
2
3 int main() {
4     int n;
5
6     printf("Enter number of elements: ");
7     scanf("%d", &n);
8
9     int arr[n];
10    printf("Enter %d elements: ", n);
11    for (int i = 0; i < n; i++) {
12        scanf("%d", &arr[i]);
13    }
14
15    printf("Previous Greater Elements: ");
16    for (int i = 0; i < n; i++) {
17        int prevGreater = -1; // Default if none found
18
19        // Check all elements to the left of arr[i]
20        for (int j = i - 1; j >= 0; j--) {
21            if (arr[j] > arr[i]) {
22                prevGreater = arr[j];
23                break; // nearest greater found
24            }
25        }
26
27        // Print result
28        printf("%d", prevGreater);
29
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS SPELL CHECKER +

```
cd "/Users/rishabhtrivedi/Documents/vs/c++/" && gcc day57.c -o day57 && "/Users/rishabhtrivedi/Documents/vs/c++/"day57
● rishabhtrivedi@Rishabhs-MacBook-Air vs % cd "/Users/rishabhtrivedi/Documents/vs/c++/" && gcc day57.c -o day57 && "/Users/rishabhtrivedi/Documents/vs/c++/"day57
Enter number of elements: 2
Enter 2 elements: 34
34
Previous Greater Elements: -1, -1
○ rishabhtrivedi@Rishabhs-MacBook-Air c++ %
```



```
70.c U C day53.c U C 53.2.c U C day54.c U C day55.c U X ▷  
c++ > C day55.c > ...  
1 #include <stdio.h>  
2 #include <math.h>  
3  
4 int main() {  
5     int n;  
6     printf("Enter a positive integer n: ");  
7     scanf("%d", &n);  
8  
9     // Total sum of numbers from 1 to n  
10    int totalSum = n * (n + 1) / 2;  
11  
12    // We want x such that (1 + 2 + ... + x) = (x + ... + n)  
13    // i.e., x*(x + 1)/2 = totalSum - (x*(x - 1)/2)  
14    // Simplifies to: x^2 = totalSum  
15    int x = (int)sqrt(totalSum);  
16  
17    if (x * x == totalSum)  
18        printf("%d\n", x);  
19    else  
20        printf("-1\n");  
21  
22    return 0;  
23 }  
24
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS SPELL CHECKER

```
cd "/Users/rishabhtrivedi/Documents/vs/c++/" && gcc day55.c -o day55 && "/Users/rishabhtrivedi/Documents/vs/c++/"day55  
● rishabhtrivedi@Rishabhs-MacBook-Air vs % cd "/Users/rishabhtrivedi/Documents/vs/c++/" && gcc day55.c -o day55 && "/Users/rishabhtrivedi/Documents/vs/c++/"day55  
Enter a positive integer n:  
2  
-1  
○ rishabhtrivedi@Rishabhs-MacBook-Air c++ %
```

0 △ 0 E vs/c++ ✘ Debug ⚙ ▶ ⚡ Indexing completed. macos-clang-x64

