

Hash Agile online test

Find the largest and second largest elements in array without using sorting and build-in function

Source code:

```
package main

import (
    "fmt"
)

func largestandSecond(array []int, n int) {
    if n < 2 {
        fmt.Println("Array must have at least two elements.")
        return
    }
    var largest, secondLargest int
    if array[0] > array[1] {
        largest = array[0]
        secondLargest = array[1]
    } else {
        largest = array[1]
        secondLargest = array[0]
    }
    for i := 2; i < n; i++ {
        if array[i] > largest {
            secondLargest = largest
            largest = array[i]
        } else if array[i] > secondLargest && array[i] != largest {
```

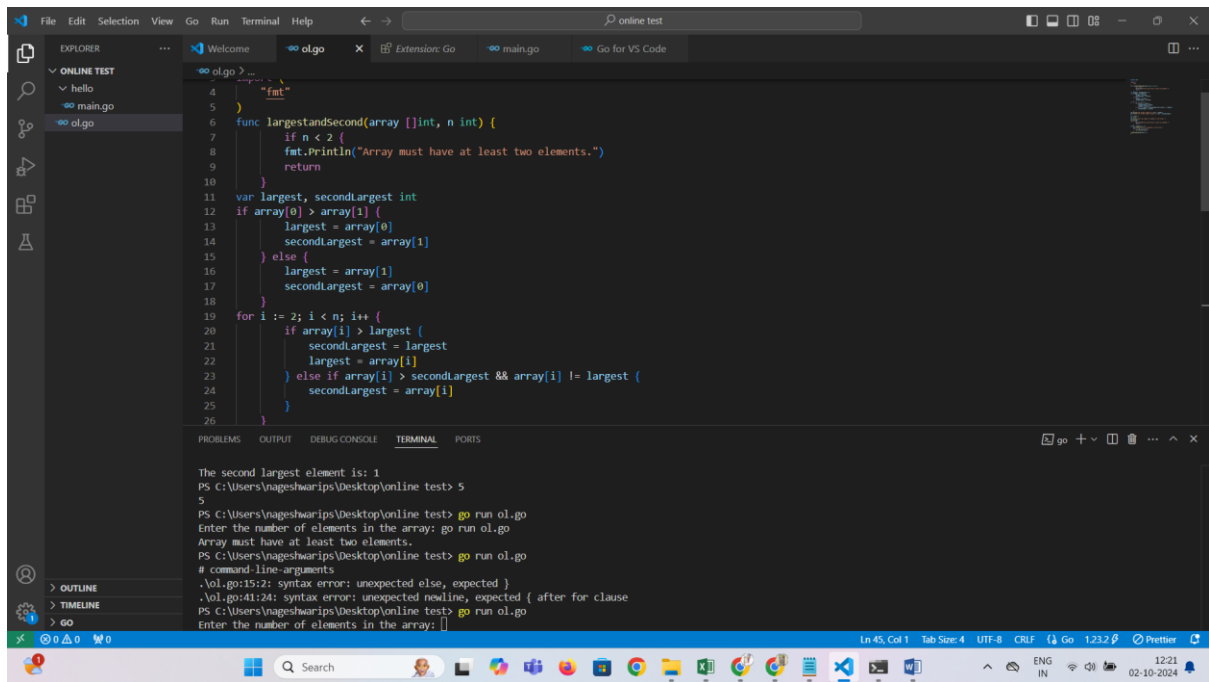
```

                secondLargest = array[i]
            }
        }

    fmt.Printf("The largest element is: %d\n", largest)
    fmt.Printf("The second largest element is: %d\n", secondLargest)
}

func main() {
    var n int
    fmt.Print("Enter the number of elements in the array: ")
    fmt.Scan(&n)
    if n < 2 {
        fmt.Println("Array must have at least two elements.")
        return
    }
    array := make([]int, n)
    fmt.Println("Enter the elements of the array:")
    for i := 0; i < n; i++ {
        fmt.Scan(&array[i])
    }
    largestandSecond(array, n)
}

```




```
File Edit Selection View Go Run Terminal Help  
online test  
EXPLORER  
ONLINE TEST  
  hello  
  main.go  
  ol.go  
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS  
The second largest element is: 1  
PS C:\Users\nageshwarips\Desktop\online test> 5  
5  
PS C:\Users\nageshwarips\Desktop\online test> go run ol.go  
Enter the number of elements in the array: go run ol.go  
Array must have at least two elements.  
PS C:\Users\nageshwarips\Desktop\online test> go run ol.go  
# command-line arguments  
.Vol.go:15:22: syntax error: unexpected else, expected )  
.Vol.go:41:24: syntax error: unexpected newline, expected { after for clause  
PS C:\Users\nageshwarips\Desktop\online test> go run ol.go  
Enter the number of elements in the array: go run ol.go  
Array must have at least two elements.  
PS C:\Users\nageshwarips\Desktop\online test> go run ol.go  
Enter the number of elements in the array: 5  
Enter the elements of the array:  
85  
43  
123  
1  
63  
The largest element is: 123  
The second largest element is: 85  
PS C:\Users\nageshwarips\Desktop\online test> |  
Ln 45, Col 1 Tab Size: 4 UTF-8 CRLF 1.23.2 Prettier  
12:23 02-10-2024
```

```
File Edit Selection View Go Run Terminal Help ← → online test
EXPLORER PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
ONLINE TEST
  hello
  main.go
  olgo

PS C:\Users\nageshwarips\Desktop\online test> 5
5
PS C:\Users\nageshwarips\Desktop\online test> go run ol.go
Enter the number of elements in the array: go run ol.go
Array must have at least two elements.
PS C:\Users\nageshwarips\Desktop\online test> go run ol.go
# command-line arguments
.Vol.go:15:22: syntax error: unexpected else, expected }
.Vol.go:41:24: syntax error: unexpected newline, expected ( after for clause
PS C:\Users\nageshwarips\Desktop\online test> go run ol.go
Enter the number of elements in the array: go run ol.go
Array must have at least two elements.
PS C:\Users\nageshwarips\Desktop\online test> go run ol.go
Enter the number of elements in the array: 5
Enter the elements of the array:
85
43
123
1
63
The largest element is: 123
The second largest element is: 85
PS C:\Users\nageshwarips\Desktop\online test> go run ol.go
Enter the number of elements in the array: 5
Enter the elements of the array:
5
4
53
46
56
The largest element is: 56
The second largest element is: 53
PS C:\Users\nageshwarips\Desktop\online test> go run ol.go
Enter the number of elements in the array: 1
Array must have at least two elements.
PS C:\Users\nageshwarips\Desktop\online test>
> OUTLINE
> TIMELINE
> GO
```

```
File Edit Selection View Go Run Terminal Help ← → online test
EXPLORER PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
ONLINE TEST
  hello
  main.go
  olgo

PS C:\Users\nageshwarips\Desktop\online test> go run ol.go
# command-line arguments
.Vol.go:15:22: syntax error: unexpected else, expected }
.Vol.go:41:24: syntax error: unexpected newline, expected ( after for clause
PS C:\Users\nageshwarips\Desktop\online test> go run ol.go
Enter the number of elements in the array: go run ol.go
Array must have at least two elements.
PS C:\Users\nageshwarips\Desktop\online test> go run ol.go
Enter the number of elements in the array: 5
Enter the elements of the array:
85
43
123
1
63
The largest element is: 123
The second largest element is: 85
PS C:\Users\nageshwarips\Desktop\online test> go run ol.go
Enter the number of elements in the array: 5
Enter the elements of the array:
5
4
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46
56
The largest element is: 56
The second largest element is: 53
PS C:\Users\nageshwarips\Desktop\online test> go run ol.go
Enter the number of elements in the array: 1
Array must have at least two elements.
PS C:\Users\nageshwarips\Desktop\online test> go run ol.go
Enter the number of elements in the array: 5
Enter the elements of the array:
5
5
5
5
5
The largest element is: 5
The second largest element is: 5
PS C:\Users\nageshwarips\Desktop\online test>
```

```
PS C:\Users\nageswarips\Desktop\online test> go run ol.go
# command-line-arguments
.\ol.go:15:12: syntax error: unexpected else, expected }
.\ol.go:41:24: syntax error: unexpected newline, expected { after for clause
PS C:\Users\nageswarips\Desktop\online test> go run ol.go
Enter the number of elements in the array: go run ol.go
Array must have at least two elements.
PS C:\Users\nageswarips\Desktop\online test> go run ol.go
Enter the number of elements in the array: 5
Enter the elements of the array:
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123
1
63
The largest element is: 123
The second largest element is: 85
PS C:\Users\nageswarips\Desktop\online test> go run ol.go
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Enter the elements of the array:
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46
56
The largest element is: 56
The second largest element is: 53
PS C:\Users\nageswarips\Desktop\online test> go run ol.go
Enter the number of elements in the array: 1
Array must have at least two elements.
PS C:\Users\nageswarips\Desktop\online test> go run ol.go
Enter the number of elements in the array: 5
Enter the elements of the array:
5
5
5
5
5
The largest element is: 5
The second largest element is: 5
PS C:\Users\nageswarips\Desktop\online test>
```

Sunbmitted by,
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