

## Tri

November 12, 2019 3:13 PM

## Tri général

```
#include <stdio.h>
#include <stdlib.h>
int main()
{
    int tab[] = {7,3,1,9,-5,7,5,5,7,4};
    int nbElem = sizeof(tab)/"nombre d'octet"// sizeof(int);
    for(int i = 0; i < nbElem; i++){
        for(int j=0; j<nbElem-1; j++){
            if(tab[j]> tab[j+1]){
                int temp = tab[j+1];
                tab[j+1] = tab[j];
                tab[j] = temp;
            }
        }
    }
    for(int i = 0; i < nbElem; i++){
        printf("%d ", tab[i]);
    }
    printf("\n");
    printf("HELLO WORLD");
    return 0;
}
```

Sortie:

```
-5 1 3 4 5 5 7 7 9
HELLO WORLD
Process returned 0 (0x0)  execution time : 0.075 s
Press any key to continue.
```

## M. Way

```
#include <stdio.h>
#include <stdlib.h>
int main()
{
    int tab[] = {7,3,1,9,-5,7,5,5,7,4, 8};
    int nbElem = sizeof(tab)/"nombre d'octet"// sizeof(int);
    for(int i = 0; i < nbElem; i++){
        for(int j=0; j<nbElem-1; j++){
            if(tab[j]> tab[j+1]){
                int temp = tab[j+1];
                tab[j+1] = tab[j];
                tab[j] = temp;
            }
        }
    }
    for(int i = 0; i < nbElem; i++){
        printf("%d ", tab[i]);
    }
    int secondLargestElem = tab[nbElem -1];/*plus grand élément moins 1*/
    for(int i = nbElem -1; i>=0; i--)
    {
        if(tab[i] < secondLargestElem){
            secondLargestElem = tab[i];
            break;
        }
    }
    printf("\nsecondLargestElem = %d\n", secondLargestElem);
    return 0;
}
```

Sortie:

```
-5 1 3 4 5 5 7 7 8 9
secondLargestElem = 8
Process returned 0 (0x0)  execution time : 0.120 s
Press any key to continue.
```

## M. Way + position

```
#include <stdio.h>
#include <stdlib.h>
int main()
{
    int tab[] = {0,7,9,3,1,9,8,-5,5,5,7,4,18};
    int nbElem = sizeof(tab)/"nombre d'octet"// sizeof(int);
    for(int i = 0; i < nbElem; i++){
        for(int j=0; j<nbElem-1; j++){
            if(tab[j]> tab[j+1]){
                int temp = tab[j+1];
                tab[j+1] = tab[j];
                tab[j] = temp;
            }
        }
    }
    for(int i = 0; i < nbElem; i++){
        printf("%d ", tab[i]);
    }

    int secondLargestElem = tab[nbElem -1];/*plus grand élément moins 1*/
    int position;
    for(int i = nbElem -1; i>=0; i--)
    {
        if(tab[i] < secondLargestElem){
            secondLargestElem = tab[i];
            position = i;
            break;
        }
    }
}
```

## Tri + 2nd plus grand

## chiffre

```
#include <stdio.h>
#include <stdlib.h>
int main()
{
    int tab[] = {7,3,1,9,-5,7,5,5,7,4};
    int nbElem = sizeof(tab)/"nombre d'octet"// sizeof(int);
    for(int i = 0; i < nbElem; i++){
        for(int j=0; j<nbElem-1; j++){
            if(tab[j]> tab[j+1]){
                int temp = tab[j+1];
                tab[j+1] = tab[j];
                tab[j] = temp;
            }
        }
    }
    for(int i = 0; i < nbElem; i++){
        printf("%d ", tab[i]);
    }
    printf("\n");

    printf("%d ", tab[nbElem-2]);
    printf("\n");
    printf("HELLO WORLD");
    return 0;
}
```

Sortie:

```
-5 1 3 4 5 5 7 7 9
7
HELLO WORLD
Process returned 0 (0x0)  execution time : 0.069 s
Press any key to continue.
```