```c
#include <stdio.h>

                                        //Yakoubi Dany
void insertion(int T[5]) {              // L1_G6
    int i, j, X;                                //tri par insertion
    for (i = 1; i < 5; i++) {
        X = T[i];
        j = i - 1;
        while (j >= 0 && T[j] < X) {
            T[j + 1] = T[j];
            j = j - 1;
        }
        T[j + 1] = X;
    }
}

int main() {
    int T[5] = {5, 2, 8, 12, 7};
    int i;

    printf("Tableau initial :\n ");
    for (i = 0; i < 5; i++) {
        printf("%d\n ", T[i]);
    }

    insertion(T);

    printf("\nTableau trié:\n ");
    for (i = 0; i < 5; i++) {
        printf("%d\n ", T[i]);
    }

    return 0;
}
```

```
Tableau initial :
5
2
8
12
7

Tableau trié:
12
8
7
5
2
yy@dell:~$
```

NORMAL main.c   unix | utf-8 | c   2%   1:1
"main.c" 34L, 695B

```c
#include <stdio.h>

void gnome(int T[5]) {
    int i = 0,temp;                    //tri gnome
    while (i < 5) {
        if (i == 0 || T[i] <= T[i-1]) {
            i++;
        } else {
            temp = T[i];
            T[i] = T[i-1];
            T[i-1] = temp;
            i--;
        }
    }
}

int main() {
    int tab[5] = {5, 2, 8, 12, 7};
    int i;

    printf("Tableau initial :\n ");
    for (i = 0; i < 5; i++) {
        printf("%d\n ", tab[i]);
    }

    gnome(tab);

    printf("\nTableau trié :\n ");
    for (i = 0; i < 5; i++) {
        printf("%d\n ", tab[i]);
    }

    return 0;
}
```

```
Tableau initial :
5
2
8
12
7

Tableau trié :
12
8
7
5
2
yy@dell:~$
```

NORMAL   main.c   unix | utf-8 | c   2%   1:1
"main.c" 35L, 624B

```c
#include <stdio.h>

void bulle(int T[5]) {          //tri a bulle(bubble sorting)
    int i, j;
    for (i = 0; i < 5 - 1; i++) {
        for (j = 0; j < 5 - i - 1; j++) {
            if (T[j] < T[j + 1]) {
                int temp = T[j];
                T[j] = T[j + 1];
                T[j + 1] = temp;
            }
        }
    }
}

int main() {
    int T[5] = {5, 3, 4, 1, 2};
    int i;

    printf("Tableau initial :\n ");
    for (i = 0; i < 5; i++) {
        printf("%d\n ", T[i]);
    }

    bulle(T);

    printf("\nTableau trié :\n ");
    for (i = 0; i < 5; i++) {
        printf("%d\n ", T[i]);
    }

    return 0;
}
```

```
Tableau initial :
5
3
4
1
2

Tableau trié :
5
4
3
2
1
yy@dell:~$
```