

# Quiz

①

```
#include <stdio.h>
```

```
void bubbleSort (int arr[], int n)
```

```
{  
    int i, j, temp;
```

```
    for (i=0; i<n; i++)
```

```
    {  
        for (j=0; j<n-i-1; j++)
```

```
        {  
            if (arr[j] > arr[j+1])
```

```
            {
```

```
                temp = arr[j];
```

```
                arr[j] = arr[j+1];
```

```
                arr[j+1] = temp;
```

```
            }
```

```
        }
```

```
    }
```

~~12~~

5 1 4 2 8

Pass-1

(5 > 1)

Interchange

(5 > 4)

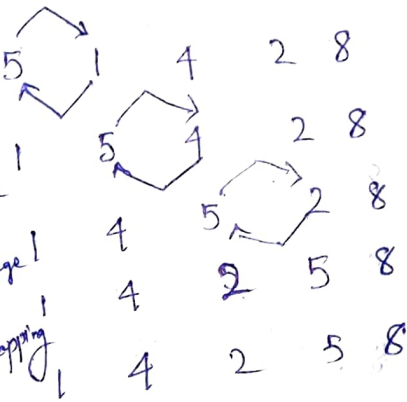
Interchange

(5 > 2)

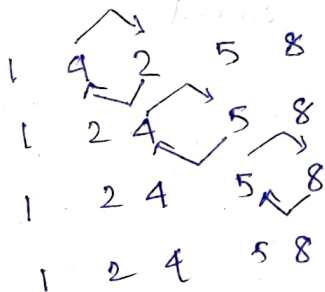
Interchange

(5 < 8)

No Swapping



Pass-2



②

```
void selectionSort (int arr[], int n)
{
    int i, j, min_idx;
    for (i=0; i<n-1; i++)
    {
        min_idx = i;
        for (j = i+1; j<n; j++)
            if (arr[j] < arr[min_idx])
                min_idx = j;
        swap (arr[min_idx], arr[i]);
    }
}
```

```
void swap (int *xp, int *yp)
{
    int temp = *xp;
    *xp = *yp;
    *yp = temp;
}
```

arr[] =

5	1	4	2	8
1	5	4	2	8
1	2	4	5	8

sorted