

**// C program for implementation of selection sort**

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

```
#include <conio.h>
```

```
void swap(int* xp, int* yp)
```

```
{
```

```
    int temp = *xp;
```

```
    *xp = *yp;
```

```
    *yp = temp;
```

```
}
```

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

```
{
```

```
    int i, j, min_idx;
```

```
    // One by one move boundary of unsorted subarray
```

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

```
        // Find the minimum element in unsorted array
```

```
        min_idx = i;
```

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

```
            if (arr[j] < arr[min_idx])
```

```
                min_idx = j;
```

```
        // Swap the found minimum element with the first element
```

```
        swap(&arr[min_idx], &arr[i]);
```

```
    }
```

```
}
```

```
/* Function to print an array */
```

```
void printArray(int arr[], int size)
```

```
{
```

```
    int i;
```

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

```
        printf("%d ", arr[i]);
```

```
}
```

```
// Driver program to test above functions
void main()
{
    int arr[] = { 64, 25, 12, 22, 11 };
    int n = sizeof(arr) / sizeof(arr[0]);
    selectionSort(arr, n);
    printf("Sorted array: \n");
    printArray(arr, n);
    getch();
}
```