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Roll No. :- 18

Experiment No. 02

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

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

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

```
{
```

```
    int i, j, small;
```

```
    for (i = 0; i < n-1; i++) // One by one move boundary of unsorted subarray
```

```
    {
```

```
        small = i; //minimum element in unsorted array
```

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

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

```
                small = j;
```

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

```
    int temp = arr[small];
```

```
    arr[small] = arr[i];
```

```
    arr[i] = temp;
```

```
}
```

```
}
```

```
void printArr(int a[], int n) /* function to print the array */
```

```
{
```

```
    int i;
```

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

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

```
}
```

```
int main()
```

```
{
```

```
    int a[] = { 12, 31, 25, 8, 32, 17 };
```

```
    int n = sizeof(a) / sizeof(a[0]);
```

```
    clrscr();
```

```
    printf("Before sorting array elements are - \n");
```

```
    printArr(a, n);
```

```
    selection(a, n);
```

```
    printf("\nAfter sorting array elements are - \n");
```

```
    printArr(a, n);
```

```
    return 0;
```

```
}
```

```
Before sorting array elements are -  
12 31 25 8 32 17  
After sorting array elements are -  
8 12 17 25 31 32
```