```
#include <stdio.h>
void swap(int *a, int *b) {
  int temp = *a;
  *a = *b;
  *b = temp;
}
int partition(int arr[], int low, int high) {
  int pivot = arr[high];
  int i = low - 1;
  for (int j = low; j \le high - 1; j++) {
     if (arr[j] < pivot) {
        i++;
        swap(&arr[i], &arr[j]);
     }
   }
  swap(&arr[i+1], &arr[high]);
  return i + 1;
void quickSort(int arr[], int low, int high) {
  if (low < high) {
     int pi = partition(arr, low, high);
     quickSort(arr, low, pi - 1);
     quickSort(arr, pi + 1, high);
   }
}
```

```
int main() {
  int n;
  printf("Enter the number of elements: ");
  scanf("%d", &n);
  int arr[n];
  printf("Enter %d elements:\n", n);
  for (int i = 0; i < n; i++) {
  scanf("%d", &arr[i]);
quickSort(arr, 0, n - 1);
printf("Sorted array: ");
for (int i = 0; i < n; i++) {
printf("%d ", arr[i]);
  printf("\n");
  return 0;
      the number of elements:
Enter 6 elements:
```