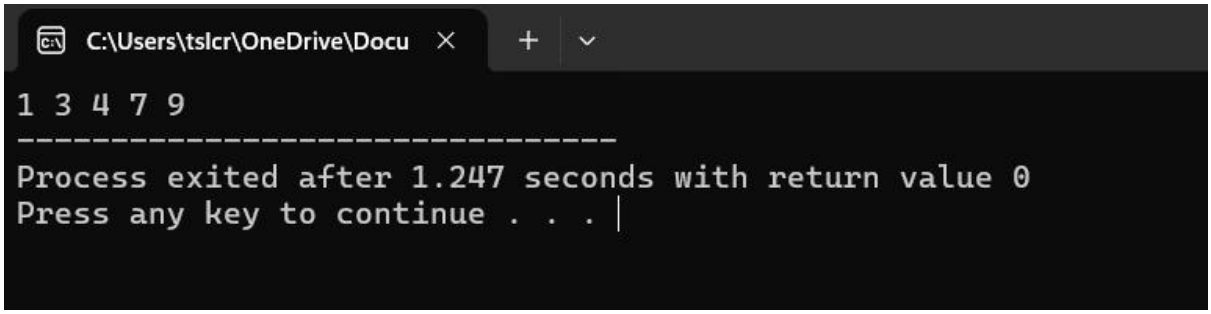
29. Write a C program to arrange a series of numbers using Quick Sort.

```
#include <stdio.h>
void swap(int* x, int* y) {
   int t = *x; *x = *y; *y = t;
}
int partition(int a[], int low, int high) {
   int pivot = a[high], i = low - 1;
   for (int j = low; j < high; j++)
      if (a[j] < pivot) swap(&a[++i], &a[j]);
   swap(&a[i+1], &a[high]);
   return i + 1;
}
void quickSort(int a[], int low, int high) {
   if (low < high) {
      int pi = partition(a, low, high);
      quickSort(a, low, pi - 1);
      quickSort(a, pi + 1, high);
   }
}
int main() {
   int a[] = {9, 4, 7, 3, 1}, n = 5;
   quickSort(a, 0, n-1);
   for (int i = 0; i < n; i++) printf("%d ", a[i]);
   return 0;
}
```

OUTPUT


C:\Users\tslcr\OneDrive\Docu
1 3 4 7 9
Process exited after 1.247 seconds with return value 0
Press any key to continue . . .