Experiment No. 3- To implement quick sort and comparative analysis for large values of 'n'

Code:

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


int main(void)
{
   int n, i, j, temp;
   int arr[64];
   printf("Enter number of elements\n");
   scanf("%d", &n);
   printf("Enter %d integers\n", n);
   for (i = 0; i < n; i++)
   {
      scanf("%d", &arr[i]);
   }
   for (i = 1; i < n; i++)
   {
      j = i;
      while (j > 0 && arr[j - 1] > arr[j])
      {
         temp = arr[j];
         arr[j] = arr[j - 1];
         arr[j - 1] = temp;
```

```
            j--;
        }
    }
    printf("Sorted list in ascending order:\n");
    for (i = 0; i < n; i++)
    {
        printf("%d\n", arr[i]);
    }
    return 0;
}
```

Output:

```
Enter number of elements
5
Enter 5 integers
2
5
12
14
8
Sorted list in ascending order:
2
5
8
12
14
Enter number of elements
S
```