Experiment No. 1- To Implement Insertion sort and comparative analysis of large value of 'n'

Code:

```c
#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;
```

```c
        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
45
3
23
54
21
Sorted list in ascending order:
3
21
23
45
54
Enter number of elements
S_
```