**EXPERIMENT NO : 1**

**Aim:-** To implement Insertion Sort and Comparative analysis for large values of ‘n’

**Program:-**

#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:**

