

Bubble Sort in C

```
#include<stdio.h>

#include<time.h>

void bubble_sort(int [],int);

void main()

{

int i,n,a[10];

printf("Enter size:\n");

scanf("%d",&n);

printf("Enter array elements:\n");

for(i=0;i<n;i++)

scanf("%d",&a[i]);

bubble_sort(a,n);

}

void bubble_sort(int a[],int n)

{

clock_t start_t, end_t, total_t;

start_t = clock();

printf("Starting of the function, start_t = %ld\n", start_t);

int t,i,j;

for(i=1;i<n;i++)

{

for(j=0;j<n-i;j++)

{

if(a[j]>a[j+1]){
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t=a[j];
a[j]=a[j+1];
a[j+1]=t;
}
}
}

printf("\n\n In Ascending order:");
for(i=0;i<n;i++)
printf("%d\t",a[i]);
end_t = clock();
printf("\nEnd of the function, end_t = %ld\n", end_t);
total_t = (double)(end_t - start_t) / CLOCKS_PER_SEC;
printf("Total time taken by CPU: %d\n", total_t );
printf("Exiting of the program...\n");
}

```

Output:

Enter size:

5

Enter array elements:

3 8 4 9 2

Starting of the function, start_t = 15788

In Ascending order:2 3 4 8 9

End of the function, end_t = 15788

Total time taken by CPU: 0

Exiting of the program...