

COMB SORT

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XI SCI B

724

```

#include<stdio.h>

void comb_sort(int n,int arr[30]);

int main()
{
    int arr[30],n,i;

    printf("Enter no. of elemets you want to enter:");
    scanf("%d",&n);

    printf("\nEnter the elements\n");
    for(i=0;i<n;i++)
    {
        scanf("%d",&arr[i]);
    }

    printf("\nArray before sorting:");

    for(i=0;i<n;i++)
    {
        printf("%d.",arr[i]);
    }

    comb_sort(n,arr);

}

void comb_sort(int n,int arr[30])
{
    int gap,swap,i,temp;

```

```
gap=n;
swap=1;

while(gap!=1 || swap == 0)
{
    gap=gap/1.3;
    swap=0;

    for(i=0;i<n-gap;i++)
    {
        if(arr[i]>arr[i+gap])
        {
            temp=arr[i];
            arr[i]=arr[i+gap];
            arr[i+gap]=temp;

            swap=1;
        }
    }
}

printf("\n\nArray after sorting:");

for(i=0;i<n;i++)
{
    printf("%d.",arr[i]);
}
}
```

```
C:\Users\Mihir Panjikar\OneDrive\Desktop\XI\CS\C programs\Project\Comb sort.exe
Enter no. of elemets you want to enter:2

Enter the elements
54
32

Array before sorting:54.32.

Array after sorting:32.54.
-----
Process exited after 5.62 seconds with return value 0
Press any key to continue . . .
```

```
C:\Users\Mihir Panjikar\OneDrive\Desktop\XI\CS\C programs\Project\Comb sort.exe
Enter no. of elemets you want to enter:9

Enter the elements
422
43
324
54
7
423
5643
23
534

Array before sorting:422.43.324.54.7.423.5643.23.534.

Array after sorting:7.23.43.54.324.422.423.534.5643.
-----
Process exited after 8.746 seconds with return value 0
Press any key to continue . . .
```

```
C:\Users\Mihir Panjika\OneDrive\Desktop\XII\CS\C programs\Project\Comb sort.exe
Enter no. of elemets you want to enter:15

Enter the elements
243
65
23
87
34
98
677
34
12
76
898
45
320
342
53

Array before sorting:243.65.23.87.34.98.677.34.12.76.898.45.320.342.53.

Array after sorting:12.23.34.34.45.53.65.76.87.98.243.320.342.677.898.
-----
Process exited after 18.42 seconds with return value 0
Press any key to continue . . .
```

```
C:\Users\Mihir Panjika\OneDrive\Desktop\XII\CS\C programs\Project\Comb sort.exe
Enter no. of elemets you want to enter:13

Enter the elements
21
23
54
6
87
9
0
12
65
45
3
43
12

Array before sorting:21.23.54.6.87.9.0.12.65.45.3.43.12.

Array after sorting:0.3.6.9.12.12.21.23.43.45.54.65.87.
```

```
C:\Users\Mihir Panjika\OneDrive\Desktop\XI\CS\C programs\Project\Comb sort.exe
Enter no. of elemets you want to enter:5

Enter the elements
34
123
7
23
4

Array before sorting:34.123.7.23.4.

Array after sorting:4.7.23.34.123.
-----
Process exited after 7.74 seconds with return value 0
Press any key to continue . . .
```

```
C:\Users\Mihir Panjika\OneDrive\Desktop\XI\CS\C programs\Project\Comb sort.exe
Enter no. of elemets you want to enter:7

Enter the elements
32
45
76
56
34
98
21

Array before sorting:32.45.76.56.34.98.21.

Array after sorting:21.32.34.45.56.76.98.
-----
Process exited after 16.28 seconds with return value 0
Press any key to continue . . .
```

C:\Users\Mihir Panjika\OneDrive\Desktop\XI\CS\C programs\Project\Comb sort.exe

Enter no. of elemets you want to enter:8

Enter the elements

45

43

76

3

12

79

7

0

Array before sorting:45.43.76.3.12.79.7.0.

Array after sorting:0.3.7.12.43.45.76.79.

Process exited after 14.08 seconds with return value 0

Press any key to continue . . .

C:\Users\Mihir Panjika\OneDrive\Desktop\XI\CS\C programs\Project\Comb sort.exe

Enter no. of elemets you want to enter:4

Enter the elements

4

3

2

1

Array before sorting:4.3.2.1.

Array after sorting:1.2.3.4.

Process exited after 8.881 seconds with return value 0

Press any key to continue . . .

```
C:\Users\Mihir Panjika\OneDrive\Desktop\XII\CS\C programs\Project\Comb sort.exe
Enter no. of elemets you want to enter:12

Enter the elements
432
32
54
76
8
65
43
23
87
08
7
65

Array before sorting:432.32.54.76.8.65.43.23.87.8.7.65.
Array after sorting:7.8.8.23.32.43.54.65.65.76.87.432.
-----
```

```
C:\Users\Mihir Panjika\OneDrive\Desktop\XII\CS\C programs\Project\Comb sort.exe
Enter no. of elemets you want to enter:20

Enter the elements
13
45
8672
435
45
78
82
20
18
161
15
13
32
2
143
67
5
4
69
5

Array before sorting:13.45.8672.435.45.78.82.20.18.161.15.13.32.2.143.67.5.4.69.5.
Array after sorting:2.4.5.5.13.13.15.18.20.32.45.45.67.69.78.82.143.161.435.8672.
-----
Process exited after 31.32 seconds with return value 0
Press any key to continue . . .
```



```
C:\Users\Mihir Panjika\OneDrive\Desktop\XI\CS\C programs\Project\Comb sort.exe
Enter no. of elemets you want to enter:2

Enter the elements
34
6

Array before sorting:34.6.

Array after sorting:6.34.
-----
Process exited after 16.36 seconds with return value 0
Press any key to continue . . . █
```

```
C:\Users\Mihir Panjika\OneDrive\Desktop\XI\CS\C programs\Project\Comb sort.exe
Enter no. of elemets you want to enter:14

Enter the elements
43
656
8734
123
2
21
434
0
6
4
8
9
43
2

Array before sorting:43.656.8734.123.2.21.434.0.6.4.8.9.43.2.

Array after sorting:0.2.2.4.6.8.9.21.43.43.123.434.656.8734.
-----
Process exited after 19.71 seconds with return value 0
Press any key to continue . . . █
```

```
C:\Users\Mihir Panjika\OneDrive\Desktop\XI\CS\programs\Project\Comb sort.exe
Enter no. of elemets you want to enter:6

Enter the elements
23
455
23
12
5
7

Array before sorting:23.455.23.12.5.7.

Array after sorting:5.7.12.23.23.455.
-----
Process exited after 15.27 seconds with return value 0
Press any key to continue . . .
```

```
C:\Users\Mihir Panjika\OneDrive\Desktop\XI\CS\programs\Project\Comb sort.exe
Enter no. of elemets you want to enter:4

Enter the elements
23
54
7
1

Array before sorting:23.54.7.1.

Array after sorting:1.7.23.54.
-----
Process exited after 8.621 seconds with return value 0
Press any key to continue . . .
```