**Program :**

#include <stdio.h>

int largest(int a[], int n)

{

int large = a[0], i;

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

{

if(large < a[i])

large = a[i];

}

return large;

}

void RadixSort(int a[], int n)

{

int bucket[10][10], bucket\_count[10];

int i,j,k,remainder,NOP=0,divisor=1,large, pass;

large = largest(a, n);

while(large > 0)

{

NOP++;

large/=10;

}

for(pass = 0; pass < NOP; pass++)

{

for(i = 0; i < 10; i++)

bucket\_count[i] = 0;

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

{

remainder = (a[i] / divisor) % 10;

bucket[remainder][bucket\_count[remainder]] = a[i];

bucket\_count[remainder] += 1;

}

i = 0;

for(k = 0; k < 10; k++)

{

for(j = 0; j < bucket\_count[k]; j++)

{

a[i] = bucket[k][j];

i++;

}

}

divisor \*= 10;

}

}

void main()

{

int n,i,f,c=0,j,t,min;

printf("Enter The Number of Elements : ");

scanf("%d",&n);

printf("Enter The ELements : \n");

int a[n];

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

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

printf("Before Swapping : \n");

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

printf("%d\t",a[i]);

RadixSort(a,n);

printf("\nAfter Swapping : \n");

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

printf("%d\t",a[i]);

}