Radix SORT

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#include<stdio.h>
int getmax(int arr[],int n){
        int max=arr[0],i;
   for(i=1;i<n;i++)
      if(arr[i]>max)
         max=arr[i];
   return max;
}
void countingSort(int arr[],int n,int exp){
        int i;
   int output[n],count[10]={0};
   for(i=0;i<n;i++)
      count[(arr[i]/exp)%10]++;
   for(i=1;i<10;i++)
      count[i]+=count[i-1];
   for(i=n-1;i>=0;i--){
      int index=(arr[i]/exp)%10;
      output[count[index]-1]=arr[i];
      count[index]--;
   }
   for(i=0;i<n;i++)
      arr[i]=output[i];
}
void radixSort(int arr[],int n){
        int exp,max;
   max=getmax(arr,n);
   for(exp=1;max/exp>0;exp*=10)
      countingSort(arr,n,exp);
}
int main(){
   int arr[100],n,i;
   printf("Enter number of elements:");
   scanf("%d",&n);
   printf("Enter %d elements:",n);
   for(i=0;i<n;i++)
      scanf("%d",&arr[i]);
   radixSort(arr,n);
   printf("Sorted array:");
   for(i=0;i<n;i++)
      printf("%d ",arr[i]);
   return 0;
}OUTPUT:
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Enterthe no of element: 5
Enter the element of the 1 4 6 9 2
The sorted array:1 2 4 6 9
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Process exited after 23.37 seconds with return value 0
Press any key to continue . . .
```