```
//Marge sort

#include<iostream.h>
#include<conio.h>
#include<stdlib.h>
#include<timer.h>
int arr[1000];
void MERGE(int low,int mid,int high)
{
	int i=low,j=mid+1,k=low;
	int brr[1000];
	while(i<=mid && j<=high)
	{
		if(arr[i]<arr[j])
		{
			brr[k]=arr[i];
			i++;
		}
		else
		{
			brr[k]=arr[j];
			j++;
		}
		k++;
	}
	while(i<=mid)
	{
		brr[k]=arr[i];
		i++;
		k++;
	}
	while(j<=high)
	{
		brr[k]=arr[j];
		j++;
		k++;
	}
	for(k=low;k<=high;k++)
	{
		 arr[k]=brr[k];
	}
}

void MERGE_SORT(int low,int high)
{
	  if(low!=high)
	  {
	int mid=(low+high)/2;
	MERGE_SORT(low,mid);
	MERGE_SORT(mid+1,high);
	MERGE(low,mid,high);
	  }
}

void main()
{
```

```
        clrscr();
        Timer T;
        int n;
        cout<<"Enter size of an array : ";
        cin>>n;
        for(int i=0;i<n;i++)
        {
              arr[i]=random(1000);
        }
        T.start();
        MERGE_SORT(0,n-1);
        T.stop();
        cout<<"After sorted Elements : "<<endl;
        for(i=0;i<n;i++)
        {
            cout<<arr[i]<<"\t";
        }
        cout<<"\n Exact time of Execution : "<<T.time();
        getch();
}
```