Recursive MergeSort

```
void Merge(int A[],int l,int mid,int h)
{
    int i=l,j=mid+1,k=l;
    int B[100];

    while(i<=mid && j<=h)
    {
        if(A[i]<A[j])
            B[k++]=A[i++];
        else
            B[k++]=A[j++];
    }
    for(;i<=mid;i++)
        B[k++]=A[i];
    for(;j<=h;j++)
        B[k++]=A[j];

    for(i=l;i<=h;i++)
        A[i]=B[i];
}



void MergeSort(int A[],int l,int h)
{
    int mid;
    if(l<h)
    {
        mid=(l+h)/2;
        MergeSort(A,l,mid);
        MergeSort(A,mid+1,h);
        Merge(A,l,mid,h);

    }
}

int main()
{
   int A[]={11,13,7,12,16,9,24,5,10,3},n=10,i;

    MergeSort(A,0,9);
```

```
    for(i=0;i<10;i++)
        printf("%d ",A[i]);
    printf("\n");

    return 0;
}
```