**DAY 17**

**CODE:**

#include<stdio.h>

#include<stdlib.h>

double findMedianSortedArrays(int\* nums1, int nums1Size, int\* nums2, int nums2Size){

int \*temp;

int n=nums1Size+nums2Size;

temp= (int \*)malloc(n\* sizeof(int));

int x =0;

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

if (i < nums1Size)

temp[i] = nums1[i];

else

{

temp[i] = nums2[x];

x++;

}

}

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

for(int j=i+1;j<n;j++){

if(temp[i]>temp[j]){

int t= temp[i];

temp[i]=temp[j];

temp[j]=t;

}

}

}

if ((n) %2 ==0){

int l = (n) /2;

return (temp[l]+temp[l-1])/2.00;

}

else {

return temp[(n)/2];

}

}

void main()

{

int \*a,\*b,n,m;

printf("\nEnter the size of first array: ");

scanf("%d",&n);

a=(int \*)malloc(n\*sizeof(int));

printf("\nEnter the elements (in a sorted manner): \n");

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

{

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

}

printf("\nEnter the size of second array: ");

scanf("%d",&m);

b=(int \*)malloc(m\*sizeof(int));

printf("\nEnter the elements (in a sorted manner): \n");

for(int i=0;i<m;i++)

{

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

}

printf("\nThe median of the two arrays is: %.2f",findMedianSortedArrays(a,n,b,m));

}

**OUTPUT:**

