**DAY 13**

**CODE:**

#include<stdio.h>

#include<stdlib.h>

#include<time.h>

int searchInsert(int\* nums, int numsSize, int target){

int i;

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

{

if(target<=nums[i])

{

return i;

}

}

return numsSize;

}

void sort(int \*arr, int n)

{

int i, j, temp;

for (i = 0; i < n - 1; i++)

for (j = 0; j < n - i - 1; j++)

if (arr[j] > arr[j + 1])

{

temp=\*(arr+j);

\*(arr+j)=\*(arr+j+1);

\*(arr+j+1)=temp;

}

}

void main()

{

int \*a,n;

int t;

srand(time(0));

printf("\nEnter the number of elements in the array: ");

scanf("%d",&n);

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

printf("\nRandomly Populating the Array...\n");

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

{

//Negative Numbers

// a[i]=rand()%100-50;

//Positive Numbers in a range (1-100)

// printf("i= %d",i);

a[i]=rand()%100+1;

}

sort(a,n);

printf("\nThe array is: ");

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

{

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

}

printf("\n\nEnter the target: ");

scanf("%d",&t);

printf("\nThe target is found at or can be inserted at index %d!",searchInsert(a,n,t));

}

**OUTPUT:**





