SORTING,INSERTION & DELETION

PROGRAM:-

#include<stdio.h>

#include<conio.h>

void main()

{

int a[20],i,j,n,t,x,d,s;

clrscr();

printf("\n Enter the numbers : ");

scanf("%d",&n);

printf("\n Entry required: \n");

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

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

clrscr();

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

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

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

{

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

{

if(a[i]>a[j])

{

t=a[j];

a[j]=a[i];

a[i]=t;

}

}

}

printf("\n choice :- ");

printf("\n (1) Sorting ");

printf("\n (2) Insertion ");

printf("\n (3) Deletion");

printf("\n Your choice : ");

scanf("%d",&s);

switch(s)

{

case 1:

{

printf("\n Sorted numbers are :\n");

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

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

}break;

case 2:

{

printf("\n Number to be inserted : ");

scanf("%d",&x);

d=n;

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

{

if(a[i]>x)

{

j=i;

while(a[j]>x)

{

if(n!=i)

{

a[n]=a[n-1];

n--;

}

else

break;

}

a[i]=x;

break;

}

else

continue;

}

printf("\n\n Sorted array with inserted number:-\n");

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

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

}break;

case 3:

{

printf("\n Enter the number to be deleted: ");

scanf("%d",&x);

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

{

d=i;

if(a[d]==x)

a[d]=a[d+1];

else if(a[d]>x)

a[d]=a[d+1];

}

printf("\n\nSorted array with deleted number:-\n");

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

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

}break;

default: printf("\n error in entry");

}

getch();

}

OUTPUT:-







