```c
#include<stdio.h>
int main()
{
  int n,a[10],i,pos,ele;
   char ch;
   printf("Enter the size of array\n");
   scanf("%d",&n);
   printf("%d\n",n);
   printf("Enter the elements of array\n");
   for(i=0;i<n;i++)
   {
       scanf("%d",&a[i]);
       printf("%d\t",a[i]);
   }
   printf("\nThe array elements are \n");
   for(i=0;i<n;i++)
   {
       printf("%d\t",a[i]);
   }
   printf("\nEnter the choice\n 1 for insertio
   scanf(" %c",&ch);
   printf(" %c\n",ch);
   switch(ch)
   {
     case '1': printf("Enter the postion where
            scanf("%d",&pos);
             printf("%d\n",pos);
             printf("Enter the element to be i
             scanf("%d",&ele);
             printf("%d\n",ele);
             for(i=n-1;i>=pos;i--)
             {
                 a[i+1]=a[i];
             }
             a[pos]=ele;
             n++;
             printf("The array after insertion
             for(i=0;i<n;i++)
             {
             scanf("%d" &a[i]);
```

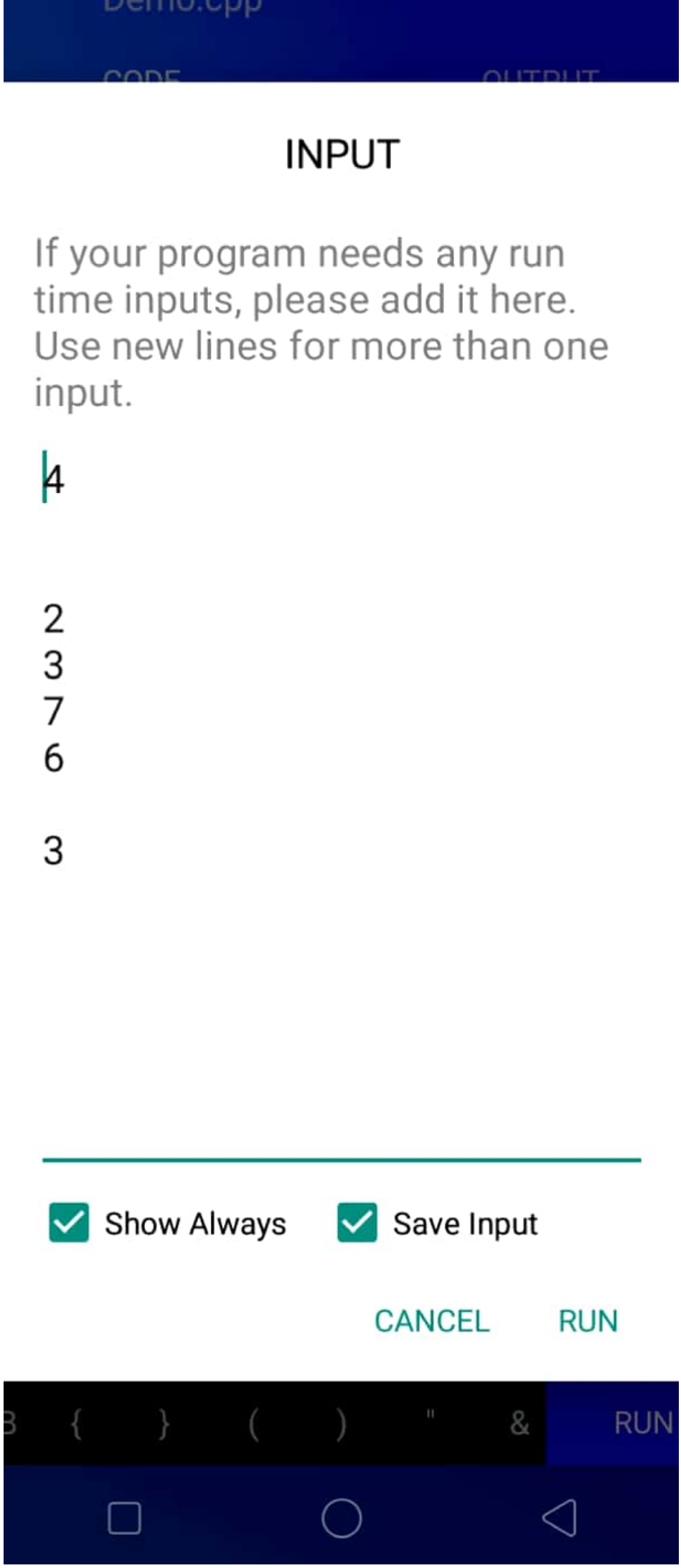
B { } ( ) " & RUN

```
,&ch);
c\n",ch);


: printf("Enter the postion where new element
canf("%d",&pos);
printf("%d\n",pos);
printf("Enter the element to be inserted\n");
scanf("%d",&ele);
printf("%d\n",ele);
for(i=n-1;i>=pos;i--)
{
    a[i+1]=a[i];
}
a[pos]=ele;
n++;
printf("The array after insertion\n");
for(i=0;i<n;i++)
{
scanf("%d",&a[i]);
printf("%d\t",a[i]);
}
break;

:printf("Enter the position where element is d
canf("%d",&pos);
rintf("%d\n",pos);
rintf("Enter the element to be deleted\n");
canf("%d",&ele);
rintf("%d\n",ele);
le=a[pos];
or(i=pos;i<n-1;i++)

   a[i]=a[i+1];

--;
rintf("The array after deletion of element\n")
or(i=0;i<n;i++)

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

```
printf("%d\n",pos);
printf("Enter the element to be inserted\n");
scanf("%d",&ele);
printf("%d\n",ele);
for(i=n-1;i>=pos;i--)
{
    a[i+1]=a[i];
}
a[pos]=ele;
n++;
printf("The array after insertion\n");
for(i=0;i<n;i++)
{
scanf("%d",&a[i]);
printf("%d\t",a[i]);
}
break;

:printf("Enter the position where element is d
canf("%d",&pos);
rintf("%d\n",pos);
rintf("Enter the element to be deleted\n");
canf("%d",&ele);
rintf("%d\n",ele);
le=a[pos];
or(i=pos;i<n-1;i++)

   a[i]=a[i+1];

--;
rintf("The array after deletion of element\n")
or(i=0;i<n;i++)

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

reak;
printf("invalid choice");
```

```
        scanf("%d",&pos);
        printf("%d\n",pos);
        printf("Enter the element to be inserte
        scanf("%d",&ele);
        printf("%d\n",ele);
        for(i=n-1;i>=pos;i--)
        {
            a[i+1]=a[i];
        }
        a[pos]=ele;
        n++;
        printf("The array after insertion\n");
        for(i=0;i<n;i++)
        {
        scanf("%d",&a[i]);
        printf("%d\t",a[i]);
        }
        break;

case '2':printf("Enter the position where elem
        scanf("%d",&pos);
        printf("%d\n",pos);
        printf("Enter the element to be deleted
        scanf("%d",&ele);
        printf("%d\n",ele);
        ele=a[pos];
        for(i=pos;i<n-1;i++)
        {
            a[i]=a[i+1];
        }
        n--;
        printf("The array after deletion of ele
        for(i=0;i<n;i++)
        {
            printf("%d\t",a[i]);
        }
        break;
default:printf("invalid choice");
```

```
            scanf("%d",&pos);
            printf("%d\n",pos);
            printf("Enter the element to be i
            scanf("%d",&ele);
            printf("%d\n",ele);
            for(i=n-1;i>=pos;i--)
            {
                a[i+1]=a[i];
            }
            a[pos]=ele;
            n++;
            printf("The array after insertion
            for(i=0;i<n;i++)
            {
            scanf("%d",&a[i]);
            printf("%d\t",a[i]);
            }
            break;

    case '2':printf("Enter the position where
            scanf("%d",&pos);
            printf("%d\n",pos);
            printf("Enter the element to be de
            scanf("%d",&ele);
            printf("%d\n",ele);
            ele=a[pos];
            for(i=pos;i<n-1;i++)
            {
                a[i]=a[i+1];
            }
            n--;
            printf("The array after deletion o
            for(i=0;i<n;i++)
            {
                printf("%d\t",a[i]);
            }
            break;
    default:printf("invalid choice");
  }
}
```



```
Enter the size of array
4
Enter the elements of array
2376
The array elements are
2376
Enter the choice
 1 for insertion   2 for deletion
 3
invalid choice
```

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Write a C program to insert and delete elements in an array.

Algorithm :—

1) Start

2) Input n

3) Display Enter array elements
   for (i=0; i<n; i++)
   input a[i]

4) Enter the choice for insertion 3 for deletion
   input ch

5) Switch (ch)

case 1 : Input n or, u2
   for(i=n-1 ; i>=position ; i--)
   a[i+1]=a[i]
   a[pos] = ele
   n++
display array a for insertion
for (i=0; i<n; i++)
output a[i]
break;

case 2: Input n or ele
pos
c | c = a [pos]
for (i = pos ; i < n-1 ; i++)
n
Display array after deletion
for (i = 0; i < n ; i++)
output a[i]
break
default : Display invalid choice

Step 6 : Stop.

Flowchart