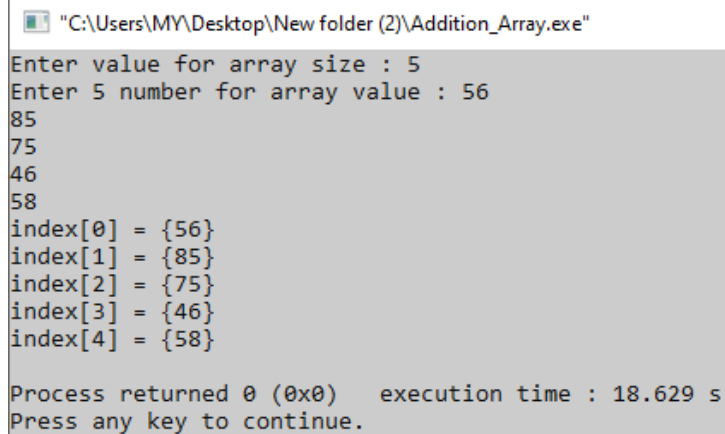


1. Write a C program to read and print elements of array.

```
#include<stdio.h>
int main()
{
    int n;
    printf("Enter value for array size : ");
    scanf("%d",&n);
    int num[n];
    printf("Enter %d number for array value : ",n);
    for(int i=0;i<n;i++)
    {
        scanf("%d",&num[i]);
    }
    for(int i=0;i<n;i++)
    {
        printf("index[%d] = {%d}\n",i,num[i]);
    }
    return 0;
}
```



```
"C:\Users\MY\Desktop\New folder (2)\Addition_Array.exe"
Enter value for array size : 5
Enter 5 number for array value : 56
85
75
46
58
index[0] = {56}
index[1] = {85}
index[2] = {75}
index[3] = {46}
index[4] = {58}
Process returned 0 (0x0)   execution time : 18.629 s
Press any key to continue.
```

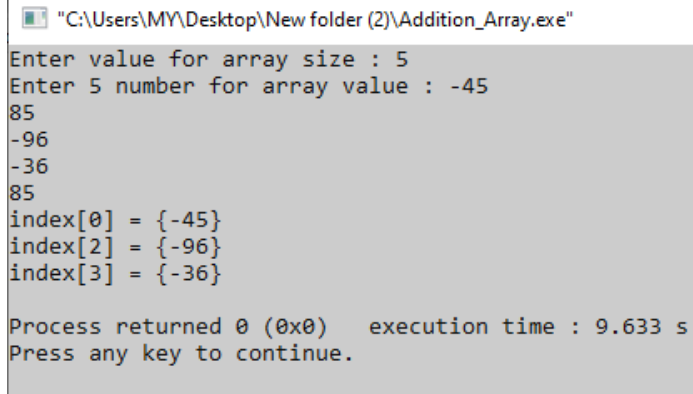
2. Write a C program to print all negative elements in an array.

```
#include<stdio.h>
int main()
{
    int n;
    printf("Enter value for array size : ");
    scanf("%d",&n);
    int num[n];
    printf("Enter %d number for array value : ",n);
    for(int i=0;i<n;i++)
    {
```

```

        scanf("%d",&num[i]);
    }
    for(int i=0;i<n;i++)
    {
        if(num[i]<0)
        {
            printf("index[%d] = {%d}\n",i,num[i]);
        }
    }
    return 0;
}

```



```

"C:\Users\MY\Desktop\New folder (2)\Addition_Array.exe"
Enter value for array size : 5
Enter 5 number for array value : -45
85
-96
-36
85
index[0] = {-45}
index[2] = {-96}
index[3] = {-36}

Process returned 0 (0x0)   execution time : 9.633 s
Press any key to continue.

```

3. Write a C program to find sum of all array elements.

```

#include<stdio.h>
int main()
{
    int n,sum=0;
    printf("Enter value for array size : ");
    scanf("%d",&n);
    int num[n];
    printf("Enter %d number for array value : ",n);
    for(int i=0;i<n;i++)
    {
        scanf("%d",&num[i]);
    }
    for(int i=0;i<n;i++)
    {
        sum+=num[i];
    }
    printf("The summation = %d",sum);
    return 0;
}

```

```
"C:\Users\MY\Desktop\New folder (2)\Addition_Array.exe"
Enter value for array size : 5
Enter 5 number for array value : 25
42
15
63
85
The summation = 230
Process returned 0 (0x0)   execution time : 8.148 s
Press any key to continue.
```

4. Write a C program to find maximum and minimum element in an array.

```
#include<stdio.h>
```

```
int main()
```

```
{
    int n,max,mini;
    printf("Enter value for array size : ");
    scanf("%d",&n);
    int num[n];
    printf("Enter %d number for array value : ",n);
    for(int i=0;i<n;i++)
    {
        scanf("%d",&num[i]);
    }
    max=num[0];
    for(int i=1;i<n;i++)
    {
        if(max<num[i])
            max=num[i];
    }
    printf("The maximum number is = %d\n",max);
    mini=num[0];
    for(int i=1;i<n;i++)
    {
        if(mini>num[i])
            mini=num[i];
    }
    printf("The minimum number is = %d\n",mini);
    return 0;
}
```

```
"C:\Users\MY\Desktop\New folder (2)\Addition_Array.exe"
Enter value for array size : 5
Enter 5 number for array value : 12
45
69
85
75
The maximum number is = 85
The minimum number is = 12
Process returned 0 (0x0)   execution time : 8.122 s
Press any key to continue.
```

5. Write a C program to find second largest element in an array.

```

#include<stdio.h>
int main()
{
    int n,max1,max2,mini;
    printf("Enter value for array size : ");
    scanf("%d",&n);
    int num[n];
    printf("Enter %d number for array value : ",n);
    for(int i=0;i<n;i++)
    {
        scanf("%d",&num[i]);
    }
    max1=max2=num[0];
    for(int i=1;i<n;i++)
    {
        if(max1<num[i])
        {
            max2 = max1;
            max1 = num[i];
        }
    }
    printf("First largest = %d\n", max1);
    printf("Second largest = %d", max2);
    return 0;
}

```

```

C:\Users\MY\Desktop\New folder (2)\Addition_Array.exe
Enter value for array size : 5
Enter 5 number for array value : 26
36
53
54
25
First largest = 54
Second largest = 53
Process returned 0 (0x0)   execution time : 8.413 s
Press any key to continue.

```

6. Write a C program to count total number of even and odd elements in an array.

```

#include<stdio.h>
int main()
{
    int n,count1=0,count2=0;
    printf("Enter value for array size : ");
    scanf("%d",&n);
    int num[n];
    printf("Enter %d number for array value : ",n);

```

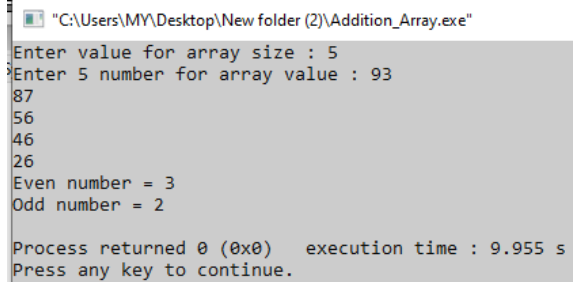
```

for(int i=0;i<n;i++)
{
    scanf("%d",&num[i]);
}

for(int i=0;i<n;i++)
{
    if(num[i]%2==0)
        count1++;
    else
        count2++;
}
printf("Even number = %d\n",count1);
printf("Odd number = %d\n",count2);

return 0;
}

```



```

"C:\Users\MY\Desktop\New folder (2)\Addition_Array.exe"
Enter value for array size : 5
Enter 5 number for array value : 93
87
56
46
26
Even number = 3
Odd number = 2

Process returned 0 (0x0)   execution time : 9.955 s
Press any key to continue.

```

7. Write a C program to count total number of negative elements in an array.

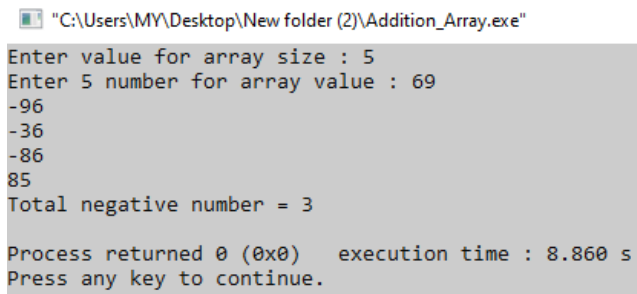
```

#include<stdio.h>
int main()
{
    int n,count=0;
    printf("Enter value for array size : ");
    scanf("%d",&n);
    int num[n];
    printf("Enter %d number for array value : ",n);
    for(int i=0;i<n;i++)
    {
        scanf("%d",&num[i]);
    }

    for(int i=0;i<n;i++)
    {
        if(num[i]<0)
            count++;
    }
    printf("Total negative number = %d\n",count);
}

```

```
return 0;
}
```



```
"C:\Users\MY\Desktop\New folder (2)\Addition_Array.exe"
Enter value for array size : 5
Enter 5 number for array value : 69
-96
-36
-86
85
Total negative number = 3
Process returned 0 (0x0)   execution time : 8.860 s
Press any key to continue.
```

8. Write a C program to copy all elements from an array to another array.

```
#include<stdio.h>
int main()
{
    int n,count=0;
    printf("Enter value for array size : ");
    scanf("%d",&n);
    int num[n],num2[n];
    printf("Enter %d number for array value : ",n);
    for(int i=0;i<n;i++)
    {
        scanf("%d",&num[i]);
    }
    printf("This value for array one : \n");
    for(int i=0;i<n;i++)
    {
        printf("num[%d] = { %d}\n",i,num[i]);
    }
    printf("This value for array two : \n");
    for(int i=0;i<n;i++)
    {
        num2[i]=num[i];
        printf("num2[%d]= { %d}\n",i,num2[i]);
    }

    return 0;
}
```

```
"C:\Users\MY\Desktop\New folder (2)\Addition_Array.exe"
Enter value for array size : 5
Enter 5 number for array value : 56
85
96
75
42
This value for array one :
num[0] = {56}
num[1] = {85}
num[2] = {96}
num[3] = {75}
num[4] = {42}
This value for array two :
num2[0]= {56}
num2[1]= {85}
num2[2]= {96}
num2[3]= {75}
num2[4]= {42}
Process returned 0 (0x0)   execution time : 8.874 s
Press any key to continue.
```

9. Write a C program to insert an element in an array.

```
#include <stdio.h>
#define MAX_SIZE 100
int main()
{
    int arr[MAX_SIZE];
    int i, size, num, pos;

    printf("Enter size of the array : ");
    scanf("%d", &size);

    printf("Enter elements in array : ");
    for(i=0; i<size; i++)
    {
        scanf("%d", &arr[i]);
    }

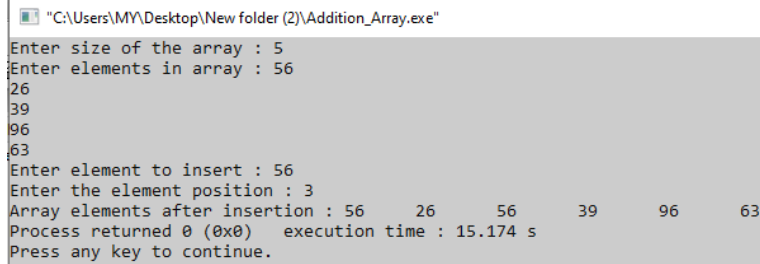
    printf("Enter element to insert : ");
    scanf("%d", &num);
    printf("Enter the element position : ");
    scanf("%d", &pos);

    if(pos > size+1 || pos <= 0)
    {
        printf("Invalid position! Please enter position between 1 to %d", size);
    }
    else
    {
        for(i=size; i>=pos; i--)
        {
            arr[i] = arr[i-1];
        }
    }
}
```

```

    arr[pos-1] = num;
    size++;
    printf("Array elements after insertion : ");
    for(i=0; i<size; i++)
    {
        printf("%d\t", arr[i]);
    }
}
return 0;
}

```



```

"C:\Users\MY\Desktop\New folder (2)\Addition_Array.exe"
Enter size of the array : 5
Enter elements in array : 56
26
39
96
63
Enter element to insert : 56
Enter the element position : 3
Array elements after insertion : 56    26    56    39    96    63
Process returned 0 (0x0)   execution time : 15.174 s
Press any key to continue.

```

10. Write a C program to delete an element from an array at specified position.

```

#include <stdio.h>
#define MAX_SIZE 100

int main()
{
    int arr[MAX_SIZE];
    int i, size, pos;

    printf("Enter size of the array : ");
    scanf("%d", &size);
    printf("Enter elements in array : ");
    for(i=0; i<size; i++)
    {
        scanf("%d", &arr[i]);
    }

    printf("Enter the element position to delete : ");
    scanf("%d", &pos);

    if(pos < 0 || pos > size)
    {
        printf("Invalid position! Please enter position between 1 to %d", size);
    }
    else
    {
        for(i=pos-1; i<size-1; i++)
        {

```



```

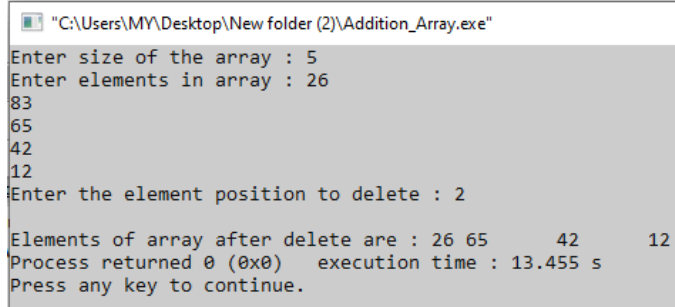
    arr[i] = arr[i + 1];
}

size--;

printf("\nElements of array after delete are : ");
for(i=0; i<size; i++)
{
    printf("%d\t", arr[i]);
}
}

return 0;
}

```



```

"C:\Users\MY\Desktop\New folder (2)\Addition_Array.exe"
Enter size of the array : 5
Enter elements in array : 26
83
65
42
12
26
Enter the element position to delete : 2
Elements of array after delete are : 26 65 42 12
Process returned 0 (0x0)   execution time : 13.455 s
Press any key to continue.

```

11. Write a C program to addition between two arrays.

```

#include<stdio.h>
int main()
{
    int n;
    printf("Enter Array size : ");
    scanf("%d",&n);
    int number1[n],number2[n],value1,value2;
    printf("Enter value for first array : ");
    scanf("%d",&value1);
    for(int i=0;i<value1;i++)
    {
        printf("index[%d] = ",i);
        scanf("%d",&number1[i]);
    }
    for(int i=0;i<value1;i++)
    {
        printf("%d\n",number1[i]);
    }
    printf("Enter value for second array : ");
    scanf("%d",&value2);
    for(int i=0;i<value2;i++)
    {
        printf("index[%d] = ",i);
        scanf("%d",&number2[i]);
    }
}

```


```

}
for(int i=0;i<value2;i++)
{
    printf("%d\n",number2[i]);
}
printf("\nResult = \n");

for(int i=0;i<value2;i++)
{
    printf("%d\n",number1[i]+number2[i]);
}

}

```

 "C:\Users\MY\Desktop\New folder (2)\Addition_Array.exe"

```

index[2] = 78
index[3] = 95
index[4] = 63

```

```

23
46
78
95
63

```

Enter value for second array : 5

```

index[0] = 12
index[1] = 26
index[2] = 78
index[3] = 56
index[4] = 96

```

```

12
26
78
56
96

```

Result =

```

35
72
156
151
159

```

Process returned 0 (0x0) execution time : 18.053 s
Press any key to continue.
