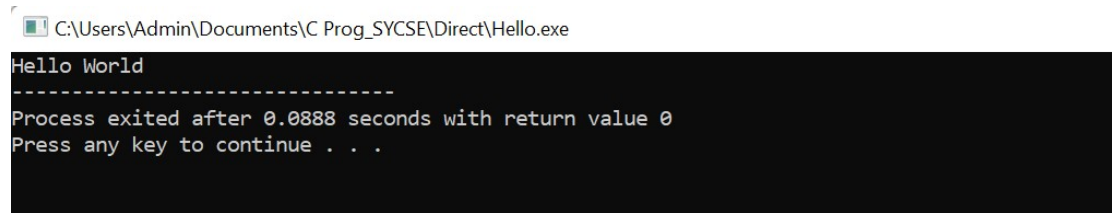


**Name : Rakesh Mahadev Bandi**  
**Class : SYCSE**  
**PRN No : 2024065738**

## **Practical No 1**

### ● Program 1: Print Hello World

```
#include<stdio.h>
int main(){
    printf("Hello World");
    return 0;
}
```



```
C:\Users\Admin\Documents\C Prog_SYCSE\Direct\Hello.exe
Hello World
-----
Process exited after 0.0888 seconds with return value 0
Press any key to continue . . .
```

### ● Program 2: Addition of 2 numbers

```
#include<stdio.h>
int main(){
    int a,b,sum;
    sum=0;

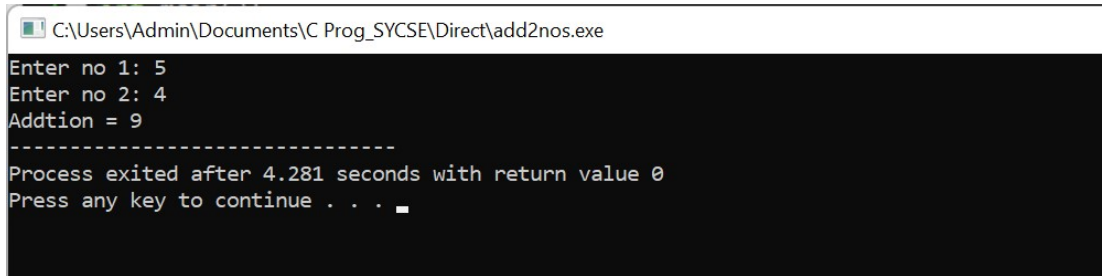
    printf("Enter no 1:");
    scanf("%d",&a);

    printf("Enter no 2:");
    scanf("%d",&b);
    sum=a+b;

    printf("Addtion = %d",sum);

    return 0;
```

```
}
```



```
C:\Users\Admin\Documents\C Prog_SYCSE\Direct\add2nos.exe
Enter no 1: 5
Enter no 2: 4
Addition = 9
-----
Process exited after 4.281 seconds with return value 0
Press any key to continue . . .
```

- Program 3: Calculate area of triangle

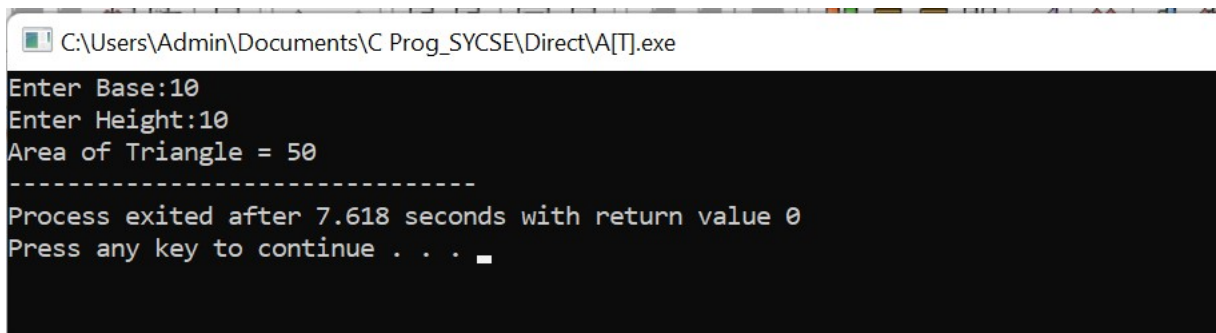
```
#include<stdio.h>
int main(){
    int b,h,area;
    area=0;

    printf("Enter Base:");
    scanf("%d",&b);

    printf("Enter Height:");
    scanf("%d",&h);

    area=(b*h)/2;

    printf("Area of Triangle = %d",area);
    return 0;
}
```



```
C:\Users\Admin\Documents\C Prog_SYCSE\Direct\A[T].exe
Enter Base:10
Enter Height:10
Area of Triangle = 50
-----
Process exited after 7.618 seconds with return value 0
Press any key to continue . . .
```

- Program 4 : Calculate Simple Interest

```
#include<stdio.h>
int main(){
    int p,r,t,si;
    si=0;

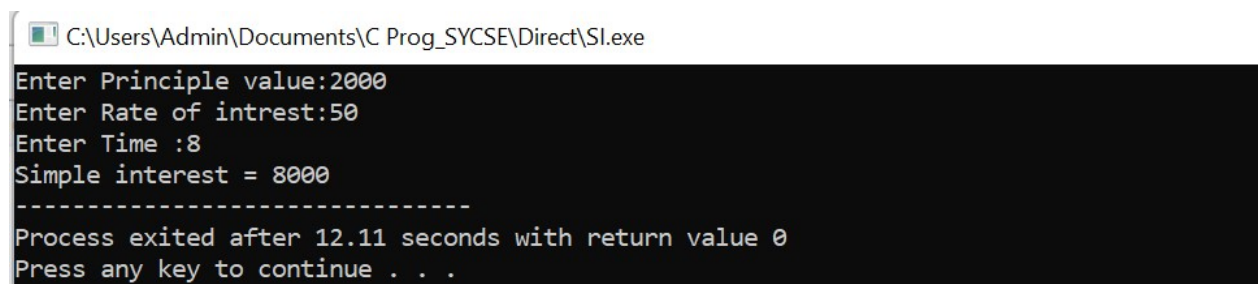
    printf("Enter Principle value:");
    scanf("%d",&p);

    printf("Enter Rate of intrest:");
    scanf("%d",&r);

    printf("Enter Time :");
    scanf("%d",&t);

    si=(p*r*t)/100;

    printf("Simple interest = %d",si);
    return 0;
}
```



C:\Users\Admin\Documents\C Prog\_SYCSE\Direct\SI.exe

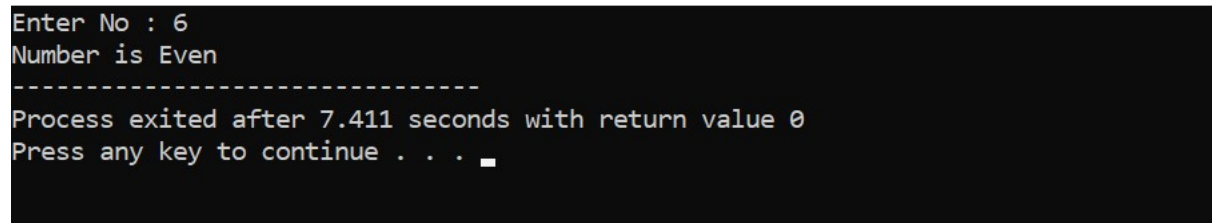

```
Enter Principle value:2000
Enter Rate of intrest:50
Enter Time :8
Simple interest = 8000
-----
Process exited after 12.11 seconds with return value 0
Press any key to continue . . .
```

**Name : Rakesh Mahadev Bandi**  
**Class : SYCSE**  
**PRN No : 2024065738**

## **Practical No 2**

- Program 1: Check the number is even or odd

```
#include<stdio.h>
int main(){
    int no;
    printf("Enter No :");
    scanf("%d",&no);
    if(no%2==0){
        printf("Number is Even");
    }
    else{
        printf("Nummber is odd");
    }
    return 0;
}
```



```
C:\Users\Admin\Documents\C Prog_SYCSE\Direct\EvenOdd.exe
Enter No : 6
Number is Even
-----
Process exited after 7.411 seconds with return value 0
Press any key to continue . . .
```

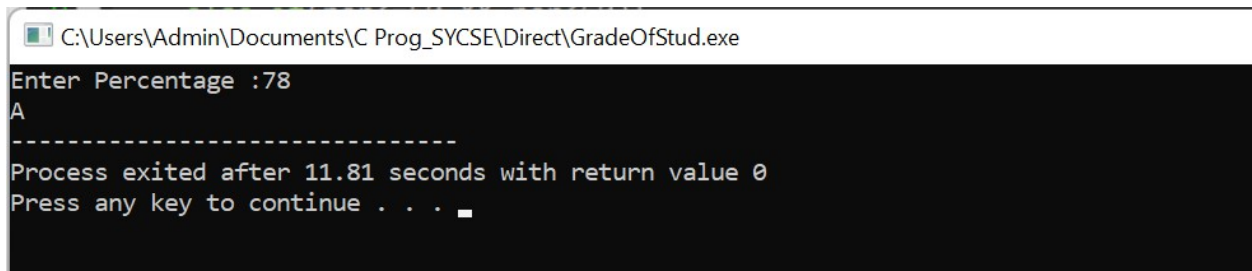
- Program 2 :Compute grade of student

```
#include<stdio.h>
int main(){
    int per;
    printf("Enter Percentage :");
    scanf("%d",&per);
```

```

if(per<50){
    printf("F");
}
else if(per<=50 && per<60){
    printf("C");
}
else if(per<=60 && per<70){
    printf("B");
}
else if(per<=70 && per<80){
    printf("B+");
}
else if(per<=80 && per<90){
    printf("A");
}
else if(per<=90 && per<100){
    printf("A+");
}
return 0;
}

```



```

C:\Users\Admin\Documents\C Prog_SYCSE\Direct\GradeOfStud.exe
Enter Percentage :78
A
-----
Process exited after 11.81 seconds with return value 0
Press any key to continue . . .

```

- Program 3 : Check year is Leap year or not

```

#include<stdio.h>
int main(){
    int year;
    printf("Enter Year : ");
    scanf("%d",&year);
    if(year%4==0){
        printf("%d is leap year",year);
    }
}

```

```

else{
    printf("%d is not leap year",year);
}
return 0;
}

```

```

C:\Users\Admin\Documents\C Prog_SYCSE\Direct\LeapYear.exe
Enter Year : 7
7 is not leap year
-----
Process exited after 2.718 seconds with return value 0
Press any key to continue . . .

```

- Program 4 : implement switch case

```

#include<stdio.h>
int main(){
    int no;
    printf("Enter nummber between (1-3) : ");
    scanf("%d",&no);
    switch (no)
    {
        case 1:printf("One");
            break;
        case 2:printf("Two");
            break;
        case 3:printf("Three");
            break;
        default:printf("invalid choice");
            break;
    }
    return 0;}

```

```

C:\Users\Admin\Documents\C Prog_SYCSE\Direct\Switch.exe
Enter number between (1-3) : 2
Two
-----
Process exited after 3.638 seconds with return value 0
Press any key to continue . . .

```

**Name : Rakesh Mahadev Bandi**

**Class : SYCSE**

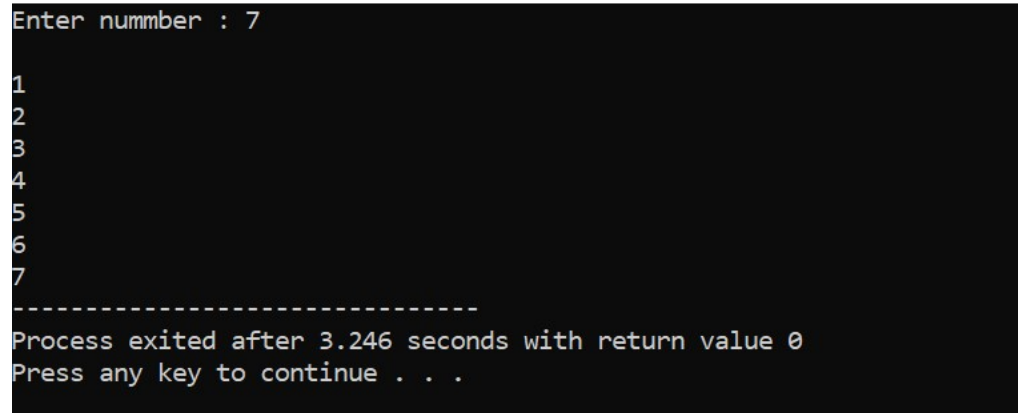

**PRN No : 2024065738**

**Practical NO 3:**

- Program no 1: print 1 to n numbers

```
#include<stdio.h>
int main(){
    int no,i;
    printf("Enter nummber : ");
    scanf("%d",&no);

    for(i=1;i<=no;i++){
        printf("\n%d",i);
    }
    return 0;
}
```



```
C:\Users\Admin\Documents\C Prog_SYCSE\Direct\1toN.exe
Enter number : 7
1
2
3
4
5
6
7
-----
Process exited after 3.246 seconds with return value 0
Press any key to continue . . .
```

- Program 2: print first odd n numbers

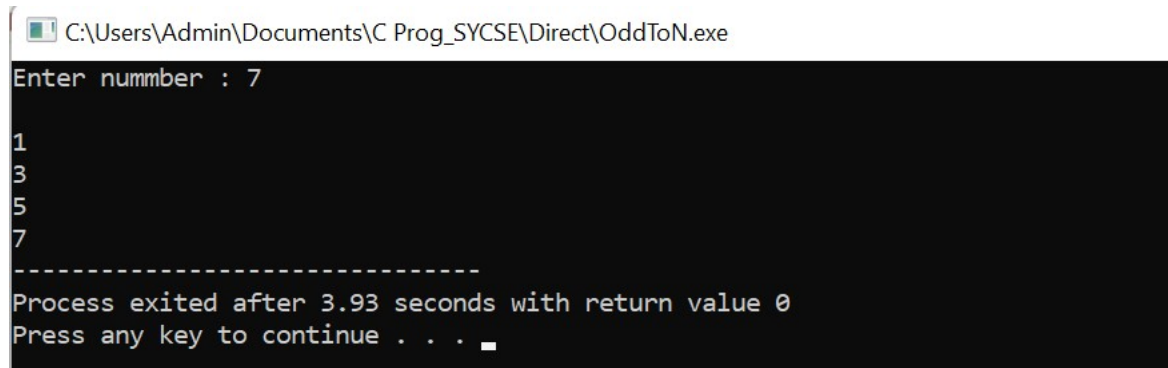
```
#include<stdio.h>
int main(){
    int no,i;
    printf("Enter nummber : ");
```

```

scanf("%d",&no);

for(i=1;i<=no;i++){
    if(i%2!=0){
        printf("\n%d",i);
    }
}
return 0;
}

```



```

C:\Users\Admin\Documents\C Prog_SYCSE\Direct\OddToN.exe
Enter number : 7
1
3
5
7
-----
Process exited after 3.93 seconds with return value 0
Press any key to continue . . .

```

### ● Program 3: Generate fibonacci series

```

#include<stdio.h>
int main(){
    int no,i;
    int first=0;
    int second=1;
    int next=first+second;

    printf("Enter nummber : ");
    scanf("%d",&no);

    printf("%d\t%d",first,second);

    for(i=1;i<=no;i++){
        printf("\t%d",next);
        first=second;
        second=next;
        next=first+second;
    }
}

```



```

    }
    return 0;
}

```

```

C:\Users\Admin\Documents\C Prog_SYCSE\Direct\fibonacci.exe
Enter number : 5
0      1      1      2      3      5      8
-----
Process exited after 1.682 seconds with return value 0
Press any key to continue . . .

```

● Program 4 : implement do while loop

```

#include<stdio.h>
int main(){
    int no;
    int i=1;
    do{
        printf("%d",i);
        i++;
    }while (i!=11);
    return 0;
}

```

```

C:\Users\Admin\Documents\C Prog_SYCSE\Direct\whileLoop.exe
12345678910
-----
Process exited after 0.06611 seconds with return value 0
Press any key to continue . . .

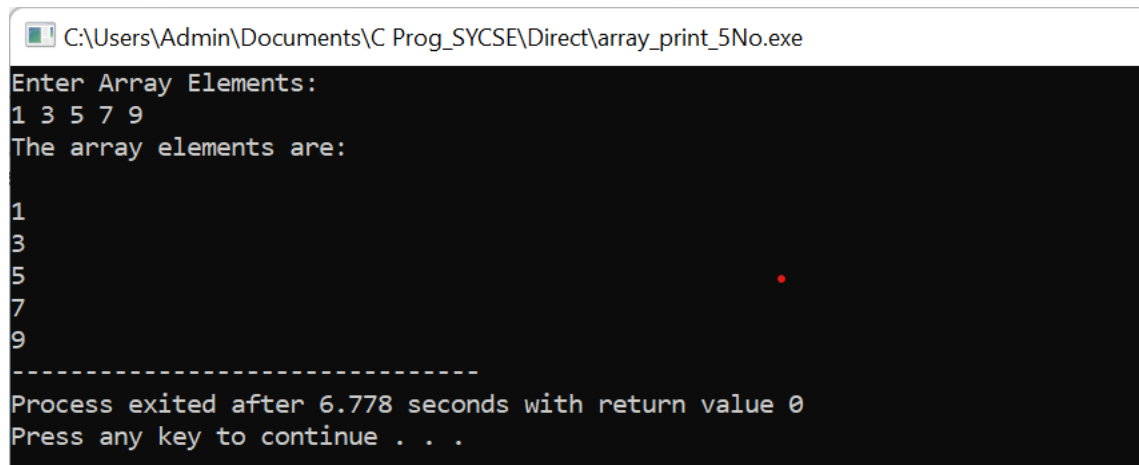
```

## **Practical No 4**

- Program 1 : Write a program to print 5 elements into an array and print the elements of array

```
//Name : Rakesh Mahadev Bandi
//Class : SYCSE
//PRN No : 2024065738
#include <stdio.h>
#include <conio.h>

int main()
{
    int a[5],i;
    printf("Enter Array Elements: \n");
    for(i=0;i<5;i++)
    {
        scanf("%d", &a[i]);
    }
    printf("The array elements are: \n");
    for(i=0;i<5;i++)
    {
        printf("\n%d ", a[i]);
    }
    return 0;
}
```



```
C:\Users\Admin\Documents\C Prog_SYCSE\Direct\array_print_5No.exe
Enter Array Elements:
1 3 5 7 9
The array elements are:
1
3
5
7
9
-----
Process exited after 6.778 seconds with return value 0
Press any key to continue . . .
```

- Program 2 : Write a program to search an element in array

```
//Name : Rakesh Mahadev Bandi
//Class : SYCSE
//PRN No : 2024065738
#include<stdio.h>
#include <conio.h>

int main()
{
    int n,i,j=0,item;
    printf("Enter the number of elements in the array: ");
    scanf("%d", &n);
    int a[n];
    printf("Enter the array elements:\n");
    for(i=0;i<n;i++)
    {
        printf("",i);
        scanf("%d", &a[i]);
    }
    printf("Enter the element to search: ");
    scanf("%d", &item);
    while(j < n)
    {
        if(a[j] == item)
        {
            break;
        }
        j = j + 1;
    }
    if(j < n)
    {
        printf("Found element %d at position %d\n", item, j);
    }
    else
    {
        printf("Element %d not found in the array\n", item);
    }
}
```

```
    return 0;
}
```

C:\Users\Admin\Documents\C Prog\_SYCSE\Direct\Search\_Element.exe

```
Enter the number of elements in the array: 5
Enter the array elements:
12 45 67 85 47
Enter the element to search: 67
Found element 67 at position 2

-----
Process exited after 23.45 seconds with return value 0
Press any key to continue . . .
```

- Program 3 : Write a program to perform addition of all elements in array

```
//Name : Rakesh Mahadev Bandi
//Class : SYCSE
//PRN No : 2024065738
#include<stdio.h>
#include <conio.h>
int main()
{
    int a[2][2],b[2][2],c[2][2],i, j;

    printf("Enter Elements For A..");
    for(i = 0; i < 2; i++)
    {
        for(j = 0; j < 2; j++)
        {
            scanf("%d", &a[i][j]);
        }
    }

    printf("\nEnter Elements For B..");
    for(i = 0; i < 2; i++)
    {
        for(j = 0; j < 2; j++)
        {
            scanf("%d", &b[i][j]);
        }
    }
}
```

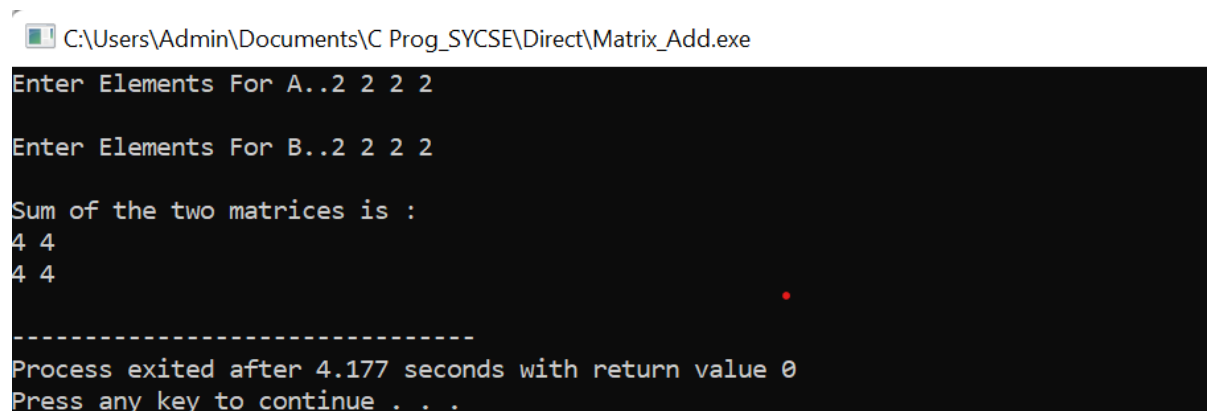
```

    }

    printf("\nSum of the two matrices is :\n");

    for(i = 0; i < 2; i++)
    {
        for(j = 0; j < 2; j++)
        {
            c[i][j] = a[i][j] - b[i][j];
            printf("%d ", c[i][j]);
        }
        printf("\n");
    }
    return 0;
}

```



```

C:\Users\Admin\Documents\C Prog_SYCSE\Direct\Matrix_Add.exe
Enter Elements For A..2 2 2 2

Enter Elements For B..2 2 2 2

Sum of the two matrices is :
4 4
4 4

-----
Process exited after 4.177 seconds with return value 0
Press any key to continue . . .

```

- Program 4 : Write a program to find the largest and smallest element in array

```

//Name : Rakesh Mahadev Bandi
//Class : SYCSE
//PRN No : 2024065738
#include<stdio.h>
#include<conio.h>

int main()
{
    int arr[100], n, i, small, large;

```

```

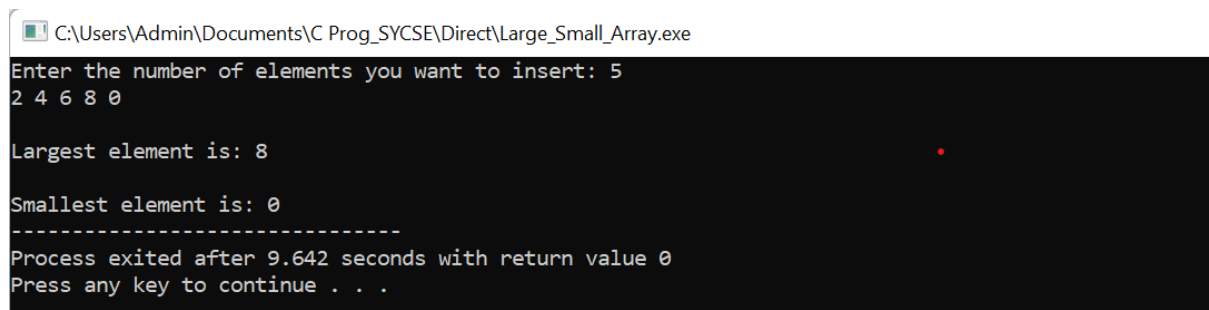
printf("Enter the number of elements you want to insert: ");
scanf("%d", &n);
for(i = 0; i < n; i++)
{
    scanf("%d", &arr[i]);
}

small = arr[0];
large = arr[0];

for(i = 1; i < n; i++)
{
    if(arr[i] < small)
    {
        small = arr[i];
    }
    if(arr[i] > large)
    {
        large = arr[i];
    }
}
printf("\nLargest element is: %d\n", large);
printf("\nSmallest element is: %d", small);

return 0;
}

```



```

C:\Users\Admin\Documents\C Prog_SYCSE\Direct\Large_Small_Array.exe
Enter the number of elements you want to insert: 5
2 4 6 8 0

Largest element is: 8

Smallest element is: 0
-----
Process exited after 9.642 seconds with return value 0
Press any key to continue . . .

```