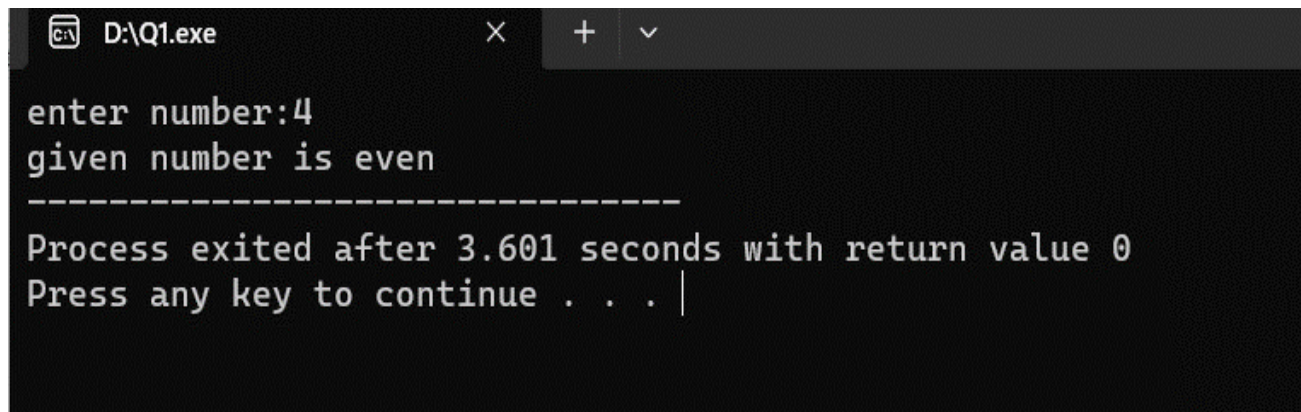


**TITLE : C Program to Find A Given Number is Even or Odd****PROGRAM :**

```
#include <stdio.h>

int main()
{
    int a;
    printf("Enter The Number:");
    scanf("%d",&a);
    if(a%2==0)
    {
        printf("Entered Number is Even");
    }
    else
    {
        printf("Entered Number is Odd");
    }
}
```

**INPUT AND OUTPUT :**

```
D:\Q1.exe
enter number:4
given number is even
-----
Process exited after 3.601 seconds with return value 0
Press any key to continue . . . |
```

**RESULT :**

**The C Program for Finding Whether a given Number is Even or Odd is Compiled and Executed Using Dev-C++ and the Output is Verified.**

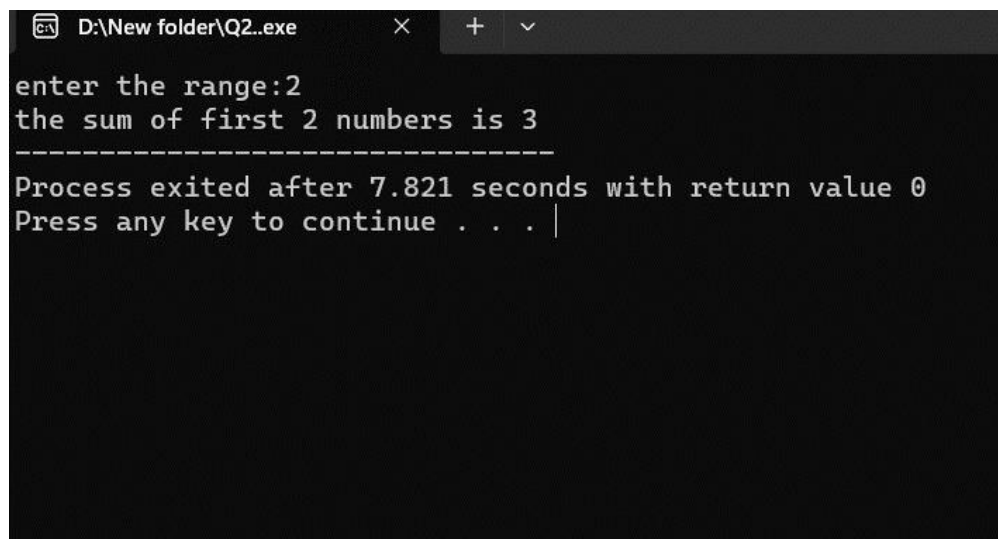
**TITLE : C Program to Print the Sum of First 'N' Numbers**

**PROGRAM :**

```
#include <stdio.h>

int main()
{
    int sum=0,n,i;
    printf("Enter The range:");
    scanf("%d",&n);
    for(i=1;i<=n;i++)
    {
        sum=sum+i;
    }
    printf("The Sum of First %d Numbers is
%d",n,sum);
}
```

**INPUT AND OUTPUT :**



```
D:\New folder\Q2..exe
enter the range:2
the sum of first 2 numbers is 3
-----
Process exited after 7.821 seconds with return value 0
Press any key to continue . . . |
```

**RESULT :**

**The C Program for Finding Sum of First 'N' Numbers is Compiled and Executed Using Dev-C++ and the Output is Verified.**

## DAY-1 (Data-Structures) Lab Session

EXP - 3

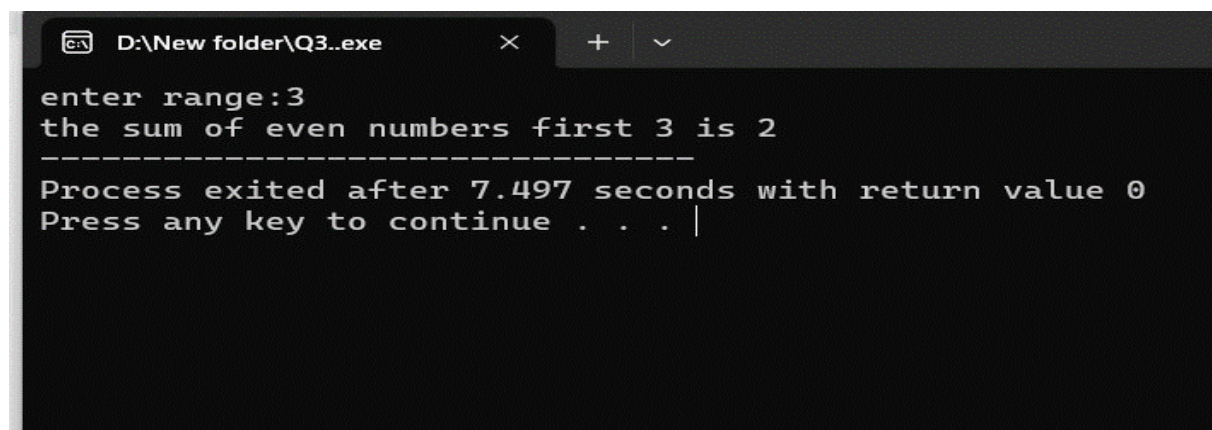
**TITLE : C Program to Find the Sum of Even Numbers in First 'N' Numbers**

**PROGRAM :**

```
#include <stdio.h>

int main()
{
    int sum=0,n,i;
    printf("Enter The range:");
    scanf("%d",&n);
    for(i=1;i<=n;i++)
    {
        if(i%2==0)
        { sum=sum+i;}
    }
    printf("The Sum of Even Numbers in First
    %d Numbers is %d",n,sum);
}
```

**INPUT AND OUTPUT :**



```
D:\New folder\Q3..exe
enter range:3
the sum of even numbers first 3 is 2
-----
Process exited after 7.497 seconds with return value 0
Press any key to continue . . . |
```

**RESULT :**

**The C Program for Finding Sum Of Even Numbers in First 'N' Numbers is Compiled and Executed Using Dev-C++ and the Output is Verified.**

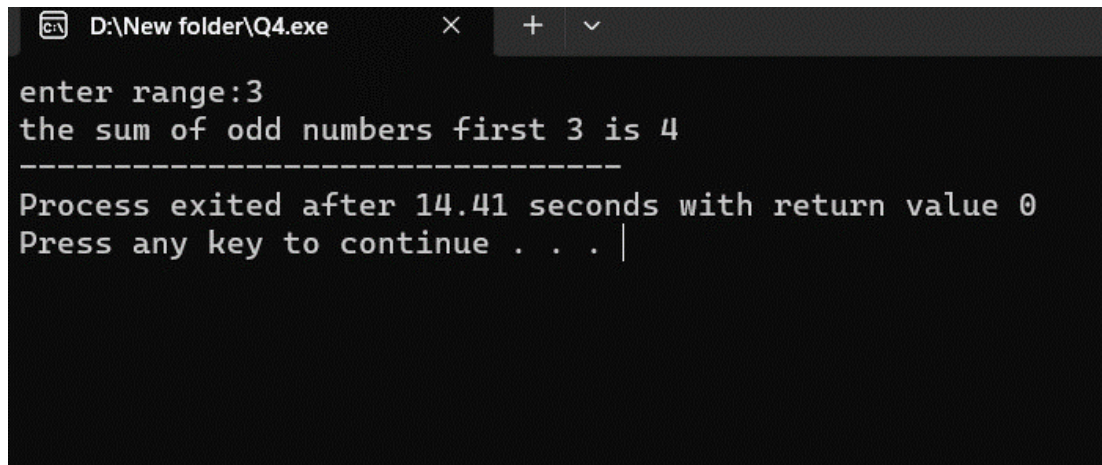
**TITLE : C Program to Print the Sum of Odd Numbers in First 'N' Numbers**

**PROGRAM :**

```
#include <stdio.h>

int main()
{
    int sum=0,n,i;
    printf("Enter The range:");
    scanf("%d",&n);
    for(i=1;i<=n;i++)
    {
        if(i%2!=0)
        { sum=sum+i;}
    }
    printf("The Sum of Odd Numbers in First
%d Numbers is %d",n,sum);
}
```

**INPUT AND OUTPUT :**



```
D:\New folder\Q4.exe
enter range:3
the sum of odd numbers first 3 is 4
-----
Process exited after 14.41 seconds with return value 0
Press any key to continue . . . |
```

**RESULT :**

**The C Program for Finding Sum of Odd Numbers in First 'N' Numbers is Compiled and Executed Using Dev-C++ and the Output is Verified.**

## DAY-1 (Data-Structures) Lab Session

### TITLE : C Program to Find the Factorial of a Given Number Without Recursion

EXP - 5

### PROGRAM :

```
#include <stdio.h>

int main()
{
    int fact=1,n;

    printf("Enter The Number to find its
    Factorial:");

    scanf("%d",&n);

    int k=n;

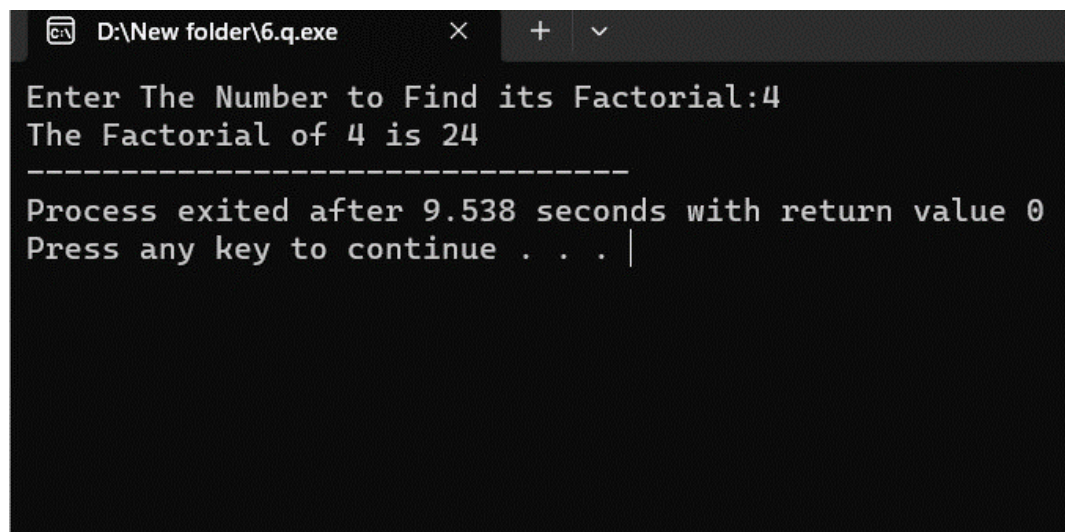
    while(n!=0)
    {
        fact=fact*n;

        n--;

    }

    printf("The Factorial of the Given Number
    is %d",fact);
```

### INPUT AND OUTPUT :

A screenshot of a terminal window with a dark background. The title bar shows the file path 'D:\New folder\6.q.exe'. The terminal displays the following text: 'Enter The Number to Find its Factorial:4', 'The Factorial of 4 is 24', a separator line of dashes, 'Process exited after 9.538 seconds with return value 0', and 'Press any key to continue . . . |'.

### RESULT :

The C Program for Finding the Factorial of Given Number without Recursive function is Compiled and Executed Using Dev-C++ and the Output is Verified.

## DAY-1 (Data-Structures) Lab Session

### TITLE : C Program to Find the Factorial of a Given Number Using Recursion

EXP - 6

#### PROGRAM :

```
#include <stdio.h>

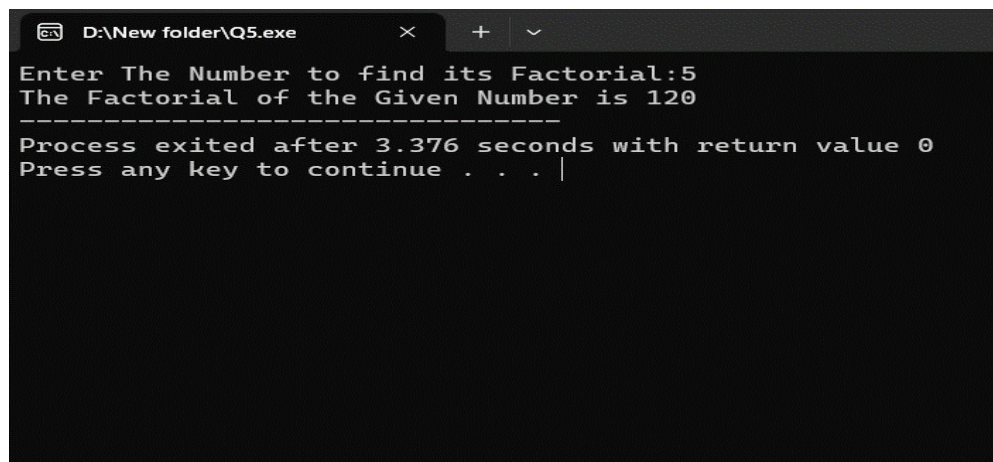
int fact(int n)
{
    int f;
    if(n==1)
    {
        return 1;
    }
    else
    {
        f=n*fact(n-1);
    }
    return f;
}

int main()
{
    int n;

    printf("Enter The Number to Find its Factorial:");
    scanf("%d",&n);

    printf("The Factorial of %d is %d",n,fact(n));}}
```

#### INPUT AND OUTPUT :



```
D:\New folder\Q5.exe
Enter The Number to find its Factorial:5
The Factorial of the Given Number is 120
-----
Process exited after 3.376 seconds with return value 0
Press any key to continue . . . |
```

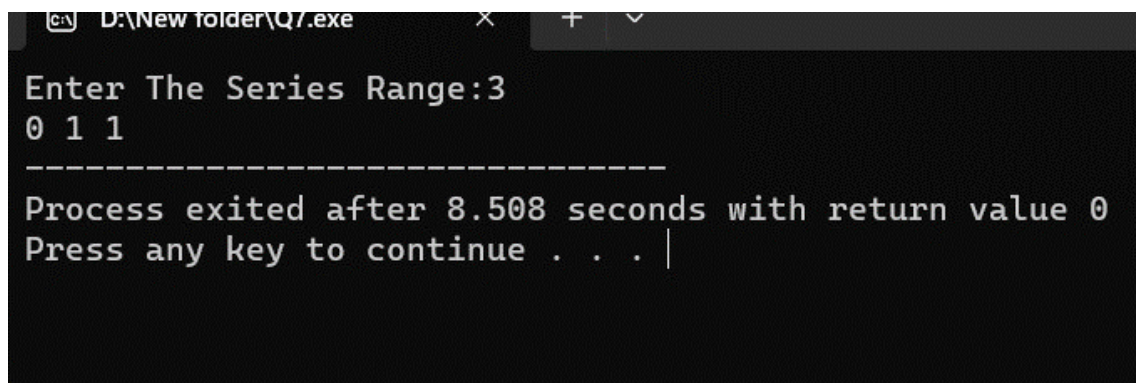
#### RESULT :

The C Program for Finding the Factorial of Given Number without Recursive function is Compiled and Executed Using Dev-C++ and the Output is Verified.

**TITLE : C Program to Print Fibonacci Series Upto 'N' Range Without Recursion****PROGRAM :**

```
#include <stdio.h>

int main()
{
    int a=0,b=1,c=0,n;
    printf("Enter The Series Range:");
    scanf("%d",&n);
    while(n!=0)
    {
        printf("%d ",a);
        a=b+c;
        b=c;
        c=a;
        n--;
    }
}
```

**INPUT AND OUTPUT :**

```
D:\New folder\Q7.exe
Enter The Series Range:3
0 1 1
-----
Process exited after 8.508 seconds with return value 0
Press any key to continue . . . |
```

**RESULT :**

**The C Program for Printing Fibonacci Series without using Recursive function is Compiled and Executed Using Dev-C++ and the Output is Verified.**

**TITLE : C Program Print Fibonacci Series Upto 'N' Range With Recursion**

**PROGRAM :**

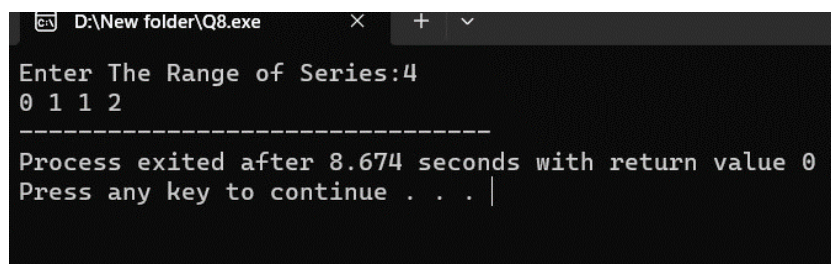
**PROGRAM :**

```
#include <stdio.h>

int fib(int n,int a,int b, int c)
{
    if(n>1)
    {
        printf("%d ",c);
        a=b+c;
        b=c;
        c=a;
        n--;
        fib(n,a,b,c);
    }
    else
    {
        printf("%d ",c);
    }
}

int main()
{
    int a;
    printf("Enter The Range of Series:");
    scanf("%d",&a);
    fib(a,0,1,0);
}
```

**INPUT AND OUTPUT :**



```
D:\New folder\Q8.exe
Enter The Range of Series:4
0 1 1 2
-----
Process exited after 8.674 seconds with return value 0
Press any key to continue . . . |
```

**RESULT**

The C Program for Finding the Fibonacci Using Recursive function is Compiled and Executed Using Dev-C++ and the Output is Verified.



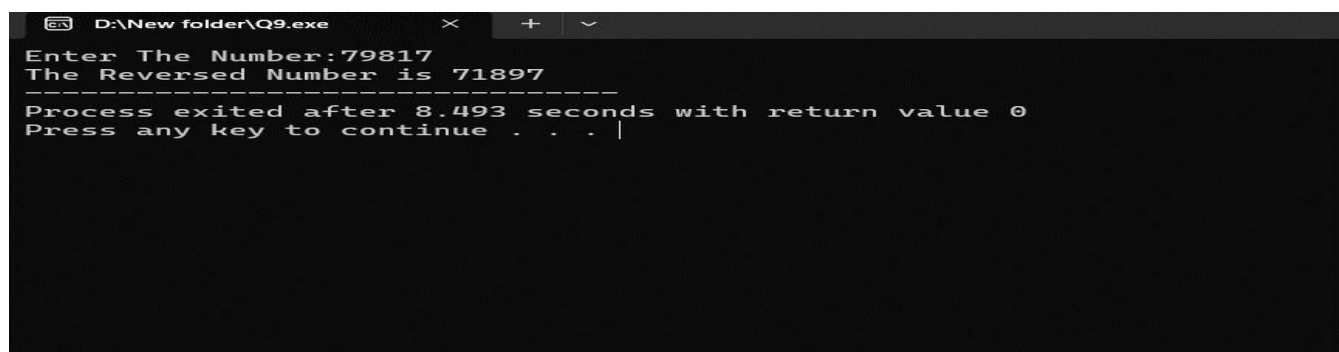
**TITLE : C Program to Reverse a Given Number**

**PROGRAM :**

```
#include <stdio.h>

int main()
{
    int a,b=0;
    printf("Enter The Number:");
    scanf("%d",&a);
    while(a!=0)
    {
        b=b*10+a%10;
        a/=10;
    }
    printf("The Reversed Number is %d",b);
}
```

**INPUT AND OUTPUT :**



```
D:\New folder\Q9.exe
Enter The Number:79817
The Reversed Number is 71897
-----
Process exited after 8.493 seconds with return value 0
Press any key to continue . . .
```

**RESULT :**

**The C Program to Reverse a Number is Compiled and Executed Using Dev-C++ and the Output is Verified.**

## DAY-1 (Data-Structures) Lab Session

EXP -

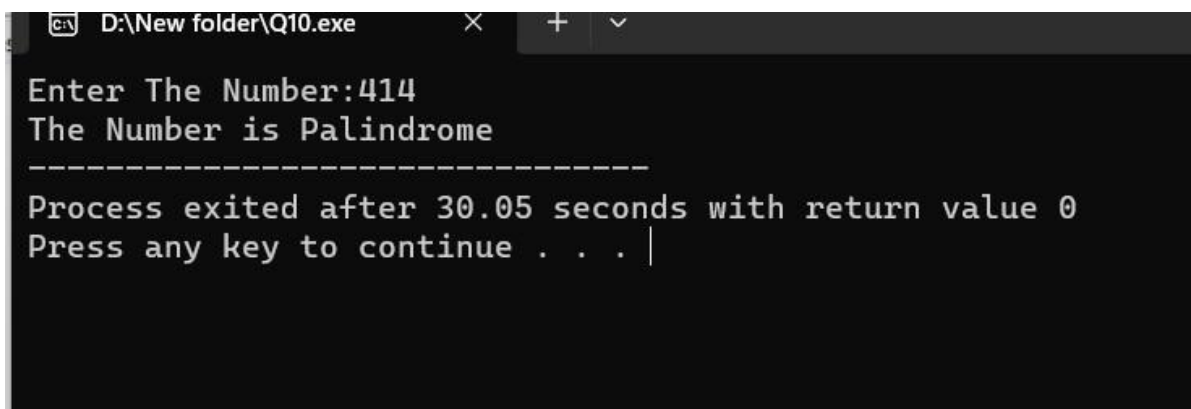
**TITLE : C Program to Find the Given Number is Palindrome or Not.**

**PROGRAM :**

```
#include <stdio.h>

int main()
{
    int a,b=0;
    printf("Enter The Number:");
    scanf("%d",&a);
    int c=a;
    while(a!=0)
    {
        b=b*10+a%10;
        a/=10;
    }
    if(c==b){
        printf("The Number is Palindrome");}
    else
    {
        printf("The Number is Not a Palindrome");
    }
}
```

**INPUT AND OUTPUT :**



```
D:\New folder\Q10.exe
Enter The Number:414
The Number is Palindrome
-----
Process exited after 30.05 seconds with return value 0
Press any key to continue . . . |
```

**RESULT :**

**The C Program for Finding a Given Number is Palindrome or Not is Compiled and Executed Using Dev-C++ and the Output is Verified.**

## DAY-1 (Data-Structures) Lab Session

EXP -

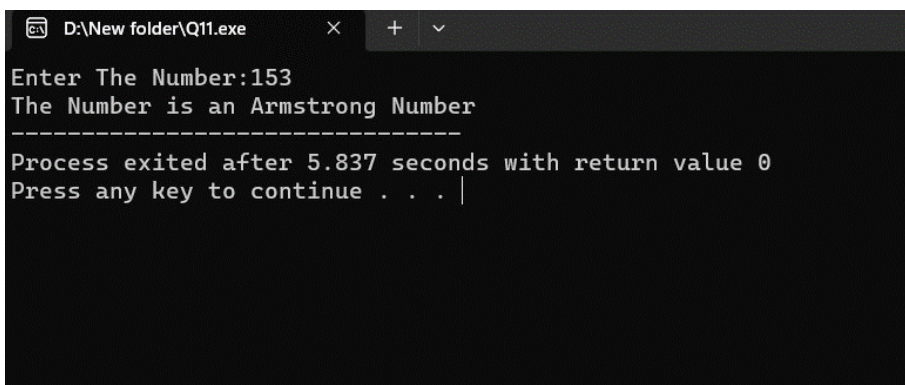
**TITLE : C Program to Find the Given Number is an Armstrong Number or Not.**

### **PROGRAM :**

```
#include <stdio.h>

int main()
{
    int a,b=0,c=0;
    printf("Enter The Number:");
    scanf("%d",&a);
    int d=a;
    while(a!=0)
    {
        c=a%10;
        b=b+(c*c*c);
        a/=10;
    }
    if(b==d)
    {
        printf("The Number is an Armstrong Number");
    }
    else
    {
        printf("The Number is Not an Armstrong Number");
    }
}
```

### **INPUT AND OUTPUT :**



```
D:\New folder\Q11.exe
Enter The Number:153
The Number is an Armstrong Number
-----
Process exited after 5.837 seconds with return value 0
Press any key to continue . . . |
```

### **RESULT :**

**The C Program for Finding the Factorial of Given Number without Recursive function is Compiled and Executed Using Dev-C++ and the Output is Verified.**