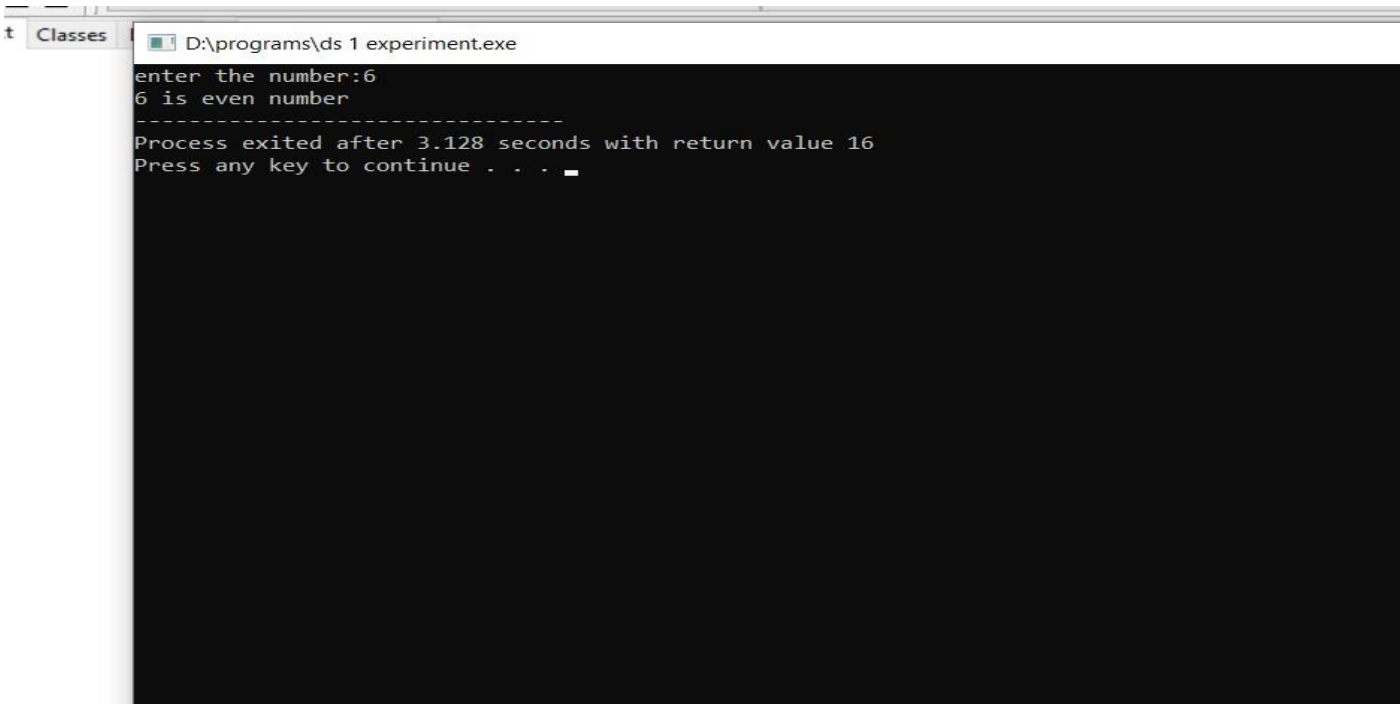
1.Write a c program to check the given number is odd or even?

PROGRAM :

```
#include<stdio.h>
int main () {
        int n;
        printf("enter the number:");
        scanf("%d",&n);
        if(n%2==0)
        {
                printf("%d is even number",n);
        }
        else
        {
                printf("%d is odd number",n);
        }
}
```

Output :

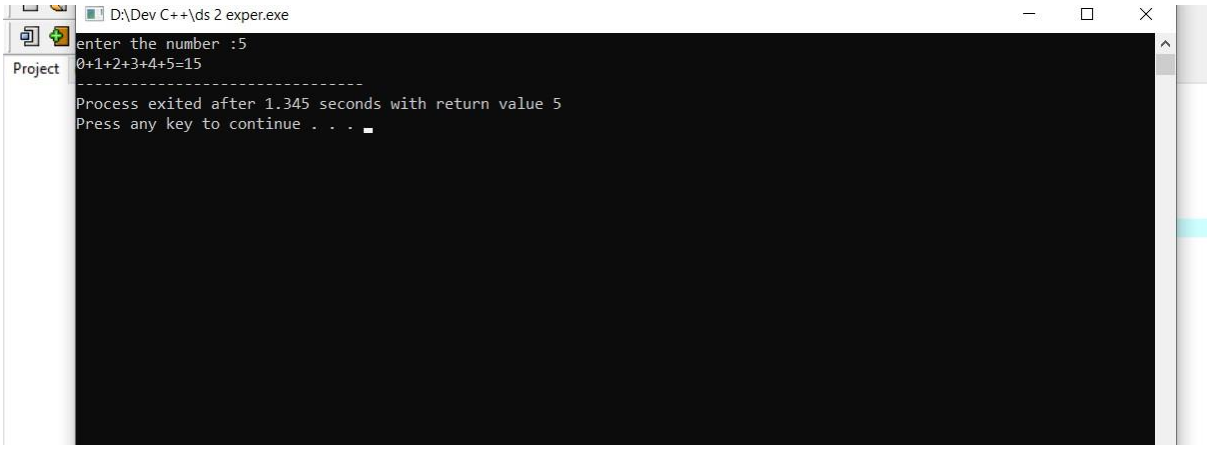


2. Write a c program to find sum of n numbers.

PROGRAM :

```
#include<stdio.h>
int main () {
        int i,n,sum=0;
        printf("enter the number :");
        scanf("%d",&n);
        for (i=0;i<=n;i++)
        {
                sum=sum+i;
                if(i<n)
                {

                        printf("%d+",i);
                }
                else if (i==n)
                {
                printf("%d=%d",i,sum);
        }
        }
}
```

Output :

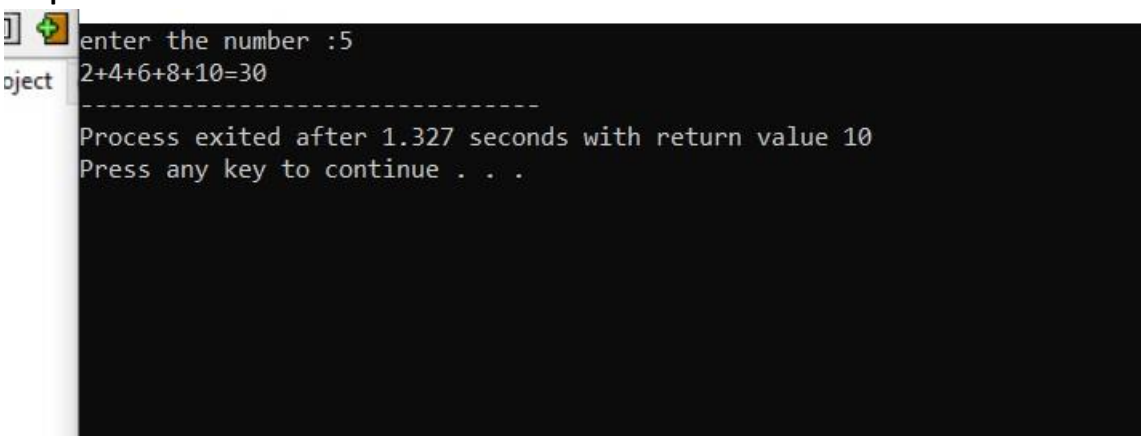


3.write a c program of sum of even numbers using while loop.

PROGRAM :

```
#include<stdio.h>
int main () {
        int i,n,sum=0;
        printf("enter the number :");
        scanf("%d",&n);
        for (i=1;i<=n*2;i++)
        {
                if(i%2==0)
                {
                sum=sum+i;
                if(i<n*2)
                {

                        printf("%d+",i);
                }
                else if (i==n*2)
                {
                printf("%d=%d",i,sum);
        }
        }
}}
```

Output:

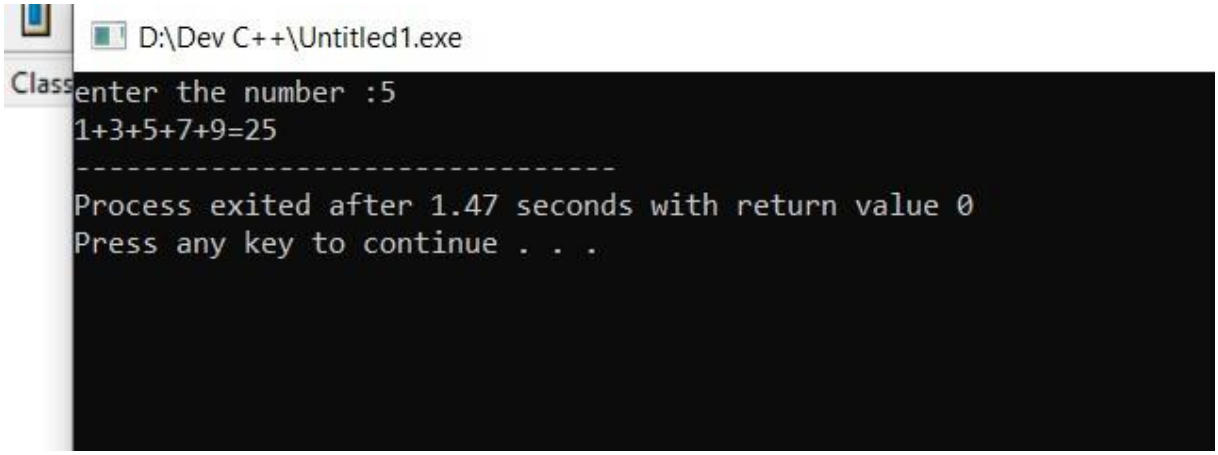


4.write a c program of sum of odd numbers using while loop.

PROGRAM:

```
#include<stdio.h>
int main () {
        int i,n,sum=0;
        printf("enter the number :");
        scanf("%d",&n);
        for (i=1;i<=n*2-1;i++)
        {if(i%2!=0)
                {
                sum=sum+i;
                if(i<n*2-1)
                {printf("%d+",i);
                }
                else if (i==n*2-1)
                {       printf("%d=%d",i,sum);
        }
        }
}}
```

Output:

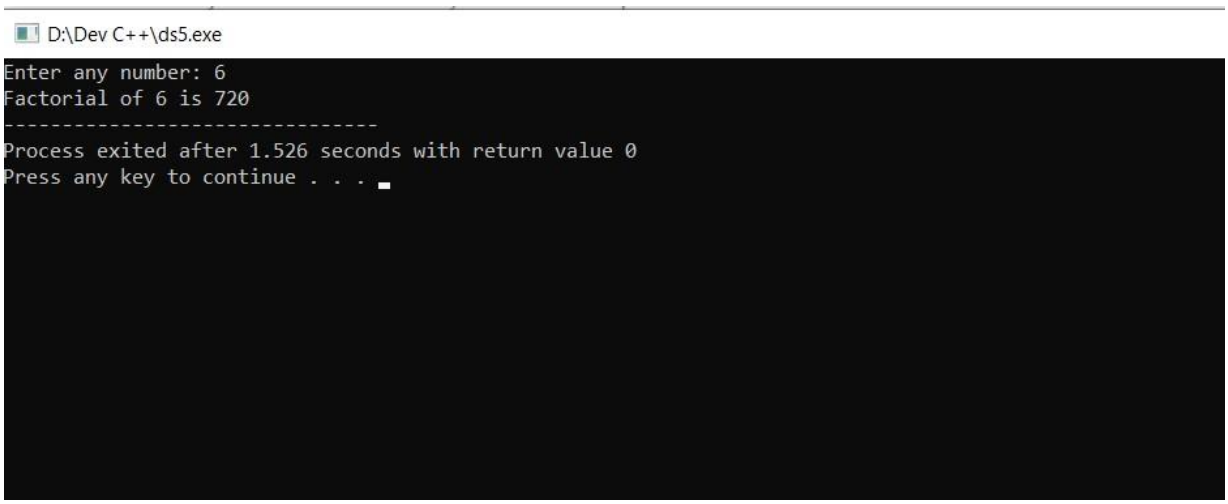


5. Write a c program for find factorial of number with recursion.

PROGRAM :

```
#include<stdio.h>
int factorial(int n)
{
	int i,fact=1;
	for(i=1;i<=n;i++)
	{
		fact=fact*i;
	}

	return fact;
}
int main ()
{
	int x,n;
	printf("enter the number:");
	scanf("%d",&n);
	x=factorial(5);
	printf("the fact is %d",&x);
}
```

OUTPUT :

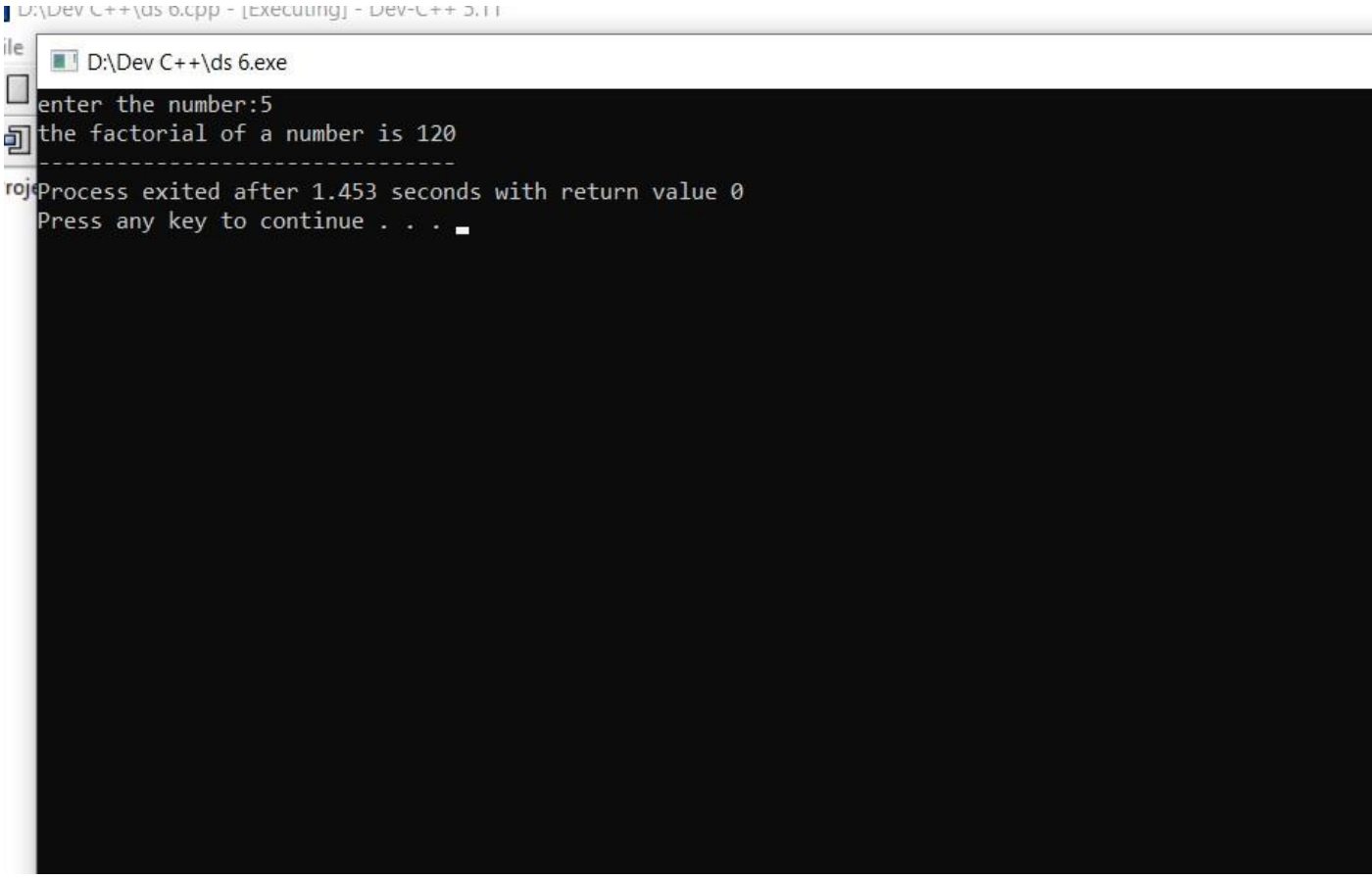


6.Write a c program for factorial of a number without recursion.

PROGRAM :

```
#include<stdio.h>

int main()

{

        int i, n,fact=1;

        printf("enter the number:");

        scanf("%d",&n);

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

        {

                fact=fact*i;

        }

        printf("the factorial of a number is %d",fact);

}
```

OUTPUT :



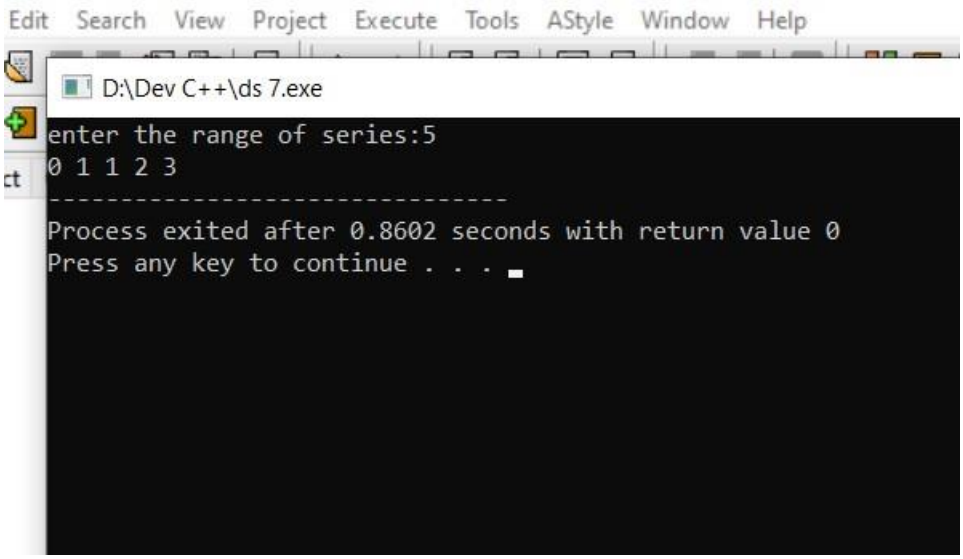
7. write a c program for Fibonacci series with recursion.

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;

        }
        else
        {
                printf("%d",c);
        }
}
int main()
{
        int n;
        printf("enter the range of series:");
        scanf("%d",&n);
        fib(n,0,1,0);
}
```

OUTPUT :

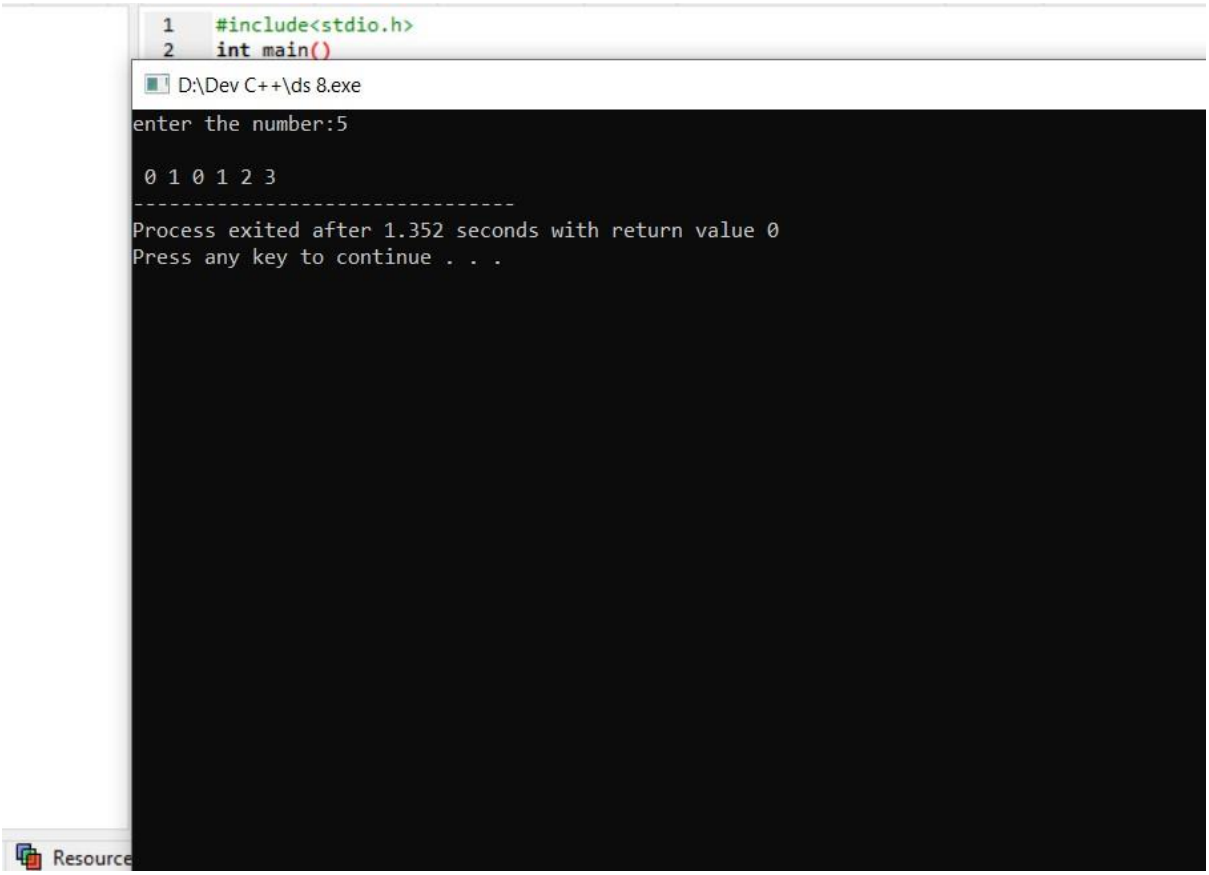


8. Write a c program for Fibonacci series without recursion.

PROGRAM :

```
#include<stdio.h>

int main()

{ int i,a=0,b=0,c=1,sum=0,n;

        printf("enter the number:");

        scanf("%d",&n);

        printf("\n %d %d ",b,c);

        for(i=2;i<=n;i++)

        {

                a=b+c;

                printf("%d ",a);

                b=c;

                c=a;

        }

}
```

OUTPUT :

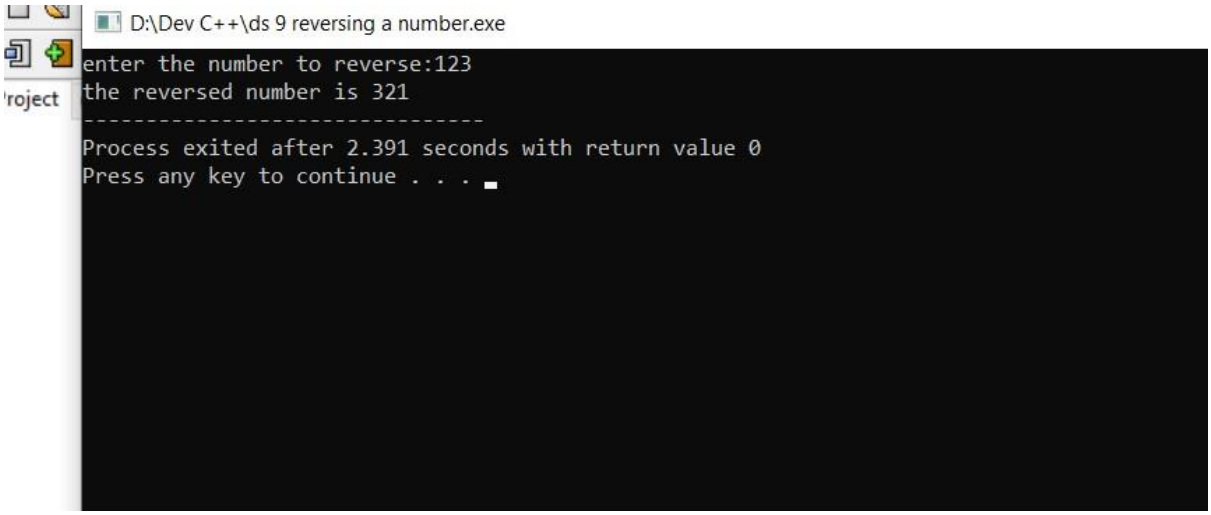


9. Write a c program for reversing a number**.**

PROGRAM :

```
#include<stdio.h>
int main() {
	int i,n,rev=0,rem=0;
	printf("enter the number to reverse:");
	scanf("%d",&n);
	while(n!=0)
	{
		rem=n%10;
		rev=rev*10+rem;
		n=n/10;
	}
	printf("the reversed number is %d",rev);
	return 0;
}
```

OUTPUT :

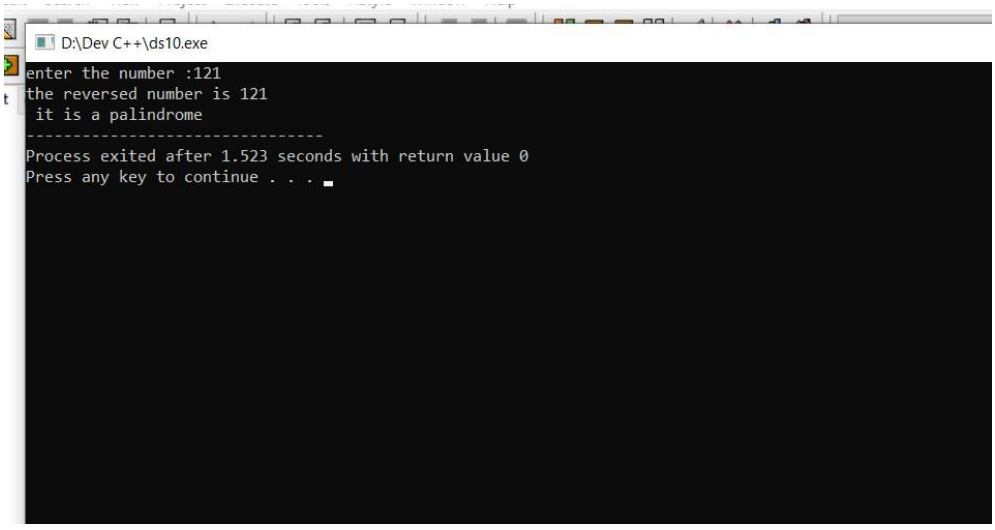


10. Write a c program for check whether the number is palindrome or not .

PROGRAM:

```
#include<stdio.h>
int main() {
        int i,n,rev=0,rem=0,x;
        printf("enter the number :");
        scanf("%d",&n);
        x=n;
        while(n!=0)
        {rem=n%10;
        rev=rev*10+rem;
                n=n/10;
        }
        if(x==rev)

        {printf("\n it is a palindrome");
        }
        else
        {printf("\n it is not a palindrome");
        }
}
```

OUTPUT :



11. Write a c program for check whether a number is armstong number or not.

PROGRAM :

```
#include<stdio.h>

int main() {
        int i,x,n,sum=0,rem;
        printf("enter the number :");
        scanf("%d",&n);
        x=n;
        while(n>0)
        {
                rem=n%10;
                sum=sum+(rem*rem*rem);
                n=n/10;
        }
        if(x==sum)
        {
                printf("it is armstrong number");
        }
        else
        {
                printf("it is not an armstrong number");
        }
}
```

OUTPUT :