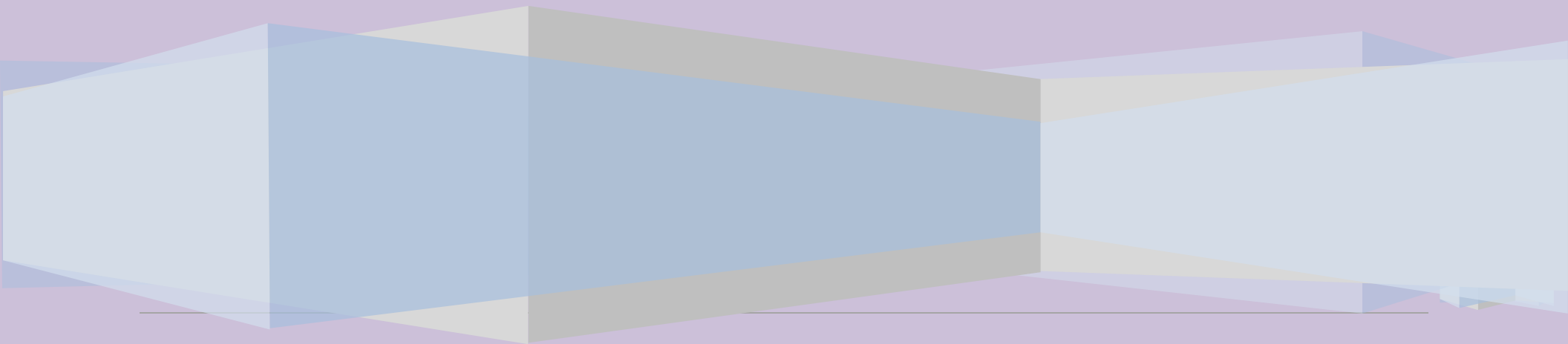


---

## MODULO:- 3.2



## 1. WAP to Swap two numbers without using third variable.

➤ #include<stdio.h>

main()

{

int num1, num2;

printf("enter number1 : ");

scanf("%d",&num1);

printf("enter number2 :");

scanf("%d",&num2);

num1 = num1 + num2;

num2 = num1 - num2;

num1 = num1 - num2;

printf("after swap number1 value : %d \n",num1);

printf("after swap number2 value : %d \n",num2);

return 0;

}



## OUTPUT

```
E:\c files\asingment 2\folder 2\2.exe
enter number1 : 24
enter number2 :3
after swap number1 value : 3
after swap number2 value : 24

-----
Process exited after 4.53 seconds with return value 0
Press any key to continue . . .
```

2.WAP to find number is even or odd using ternary operator.

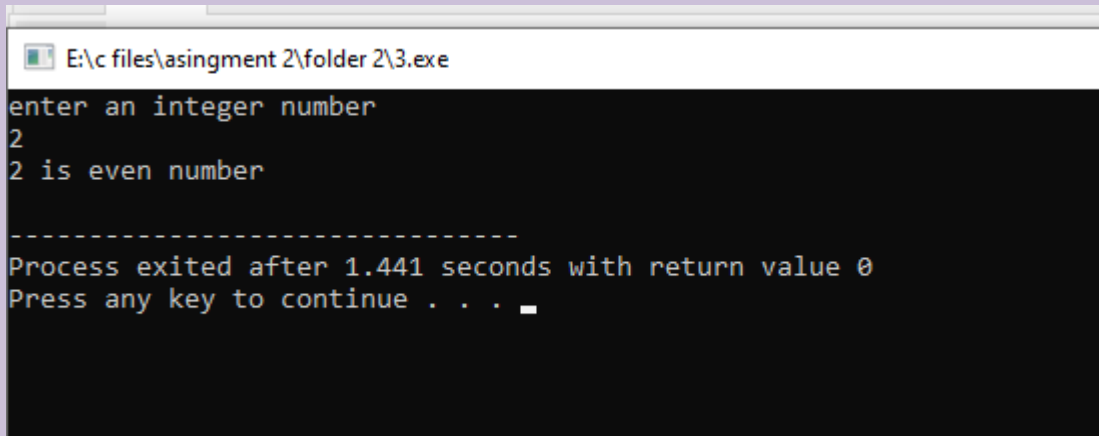
```
➤ #include<stdio.h>
main()
{
    int n;

    printf("enter an integer number \n");
    scanf("%d",&n);
```



```
(n % 2 == 0) ?  
printf("%d is even number\n",n):  
printf("%d is odd number\n",n);  
return 0;  
}
```

### OUTPUT



```
E:\c files\asingment 2\folder 2\3.exe  
enter an integer number  
2  
2 is even number  
-----  
Process exited after 1.441 seconds with return value 0  
Press any key to continue . . .
```

3 . WAP to show .

- A) Monday to Sunday using switch case
- B) Vowel or Consonant using switch case



## A) Monday to Sunday

```
➤ #include<stdio.h>
main ()
{
    int week;
    printf("enter week number(1-7): ");
    scanf("%d", &week);
    switch(week)
    {
        case 1 :
            printf("Monday");
            break;
        case 2 :
            printf("Tuesday");
            break;
        case 3 :
            printf("Wednesday");
            break;
        case 4 :
            printf("Thursday");
```



```
        break;
    case 5 :
        printf("Friday");
        break;
    case 6 :
        printf("Saturday");
        break;
    case 7 :
        printf("Sunday");
        break;
    default :
        printf("invalid input ! please enter week number bettween 1-7,");
}

return 0;
}
```

### OUTPUT



```
E:\c files\asingment 2\folder 2\4.exe
enter week number(1-7): 4
Thursday
-----
Process exited after 5.338 seconds with return value 0
Press any key to continue . . .
```

## B) Vowel or Consonant

```
➤ #include<stdio.h>
main()
{
    char ch;
    printf("enter any alphabet : ");
    scanf("%c",&ch);

    switch(ch)
    {

        case 'a' :
            printf("vowel ");
            break;
```



```
case 'e' :  
    printf("vowel ");  
    break;  
case 'i' :  
    printf("vowel ");  
    break;  
case 'o' :  
    printf("vowel ");  
    break;  
case 'u' :  
    printf("vowel ");  
    break;  
case 'A' :  
    printf("vowel ");  
    break;  
case 'E' :  
    printf("vowel ");  
    break;  
case ' O' :  
    printf("vowel");
```





```

        break;
    case 'U' :
        printf("vowel ");
        break;
    default :
        printf("consonant");
    }
}

```

### OUTPUT

```

E:\c files\asingment 2\folder 2\4.2.exe
enter any alphabet : s
consonant
-----
Process exited after 4.386 seconds with return value 0
Press any key to continue . . .

```

## 4. LOOPING PROGRAMS.

A ) WAP to Print 972 to 897 using for loop.

```

➤ #include<stdio.h>
    main()

```



```
{  
    int i;  
    for(i=972; i>=897; i--)  
    {  
        printf("%d \n",i);  
    }  
}
```

OUTPUT



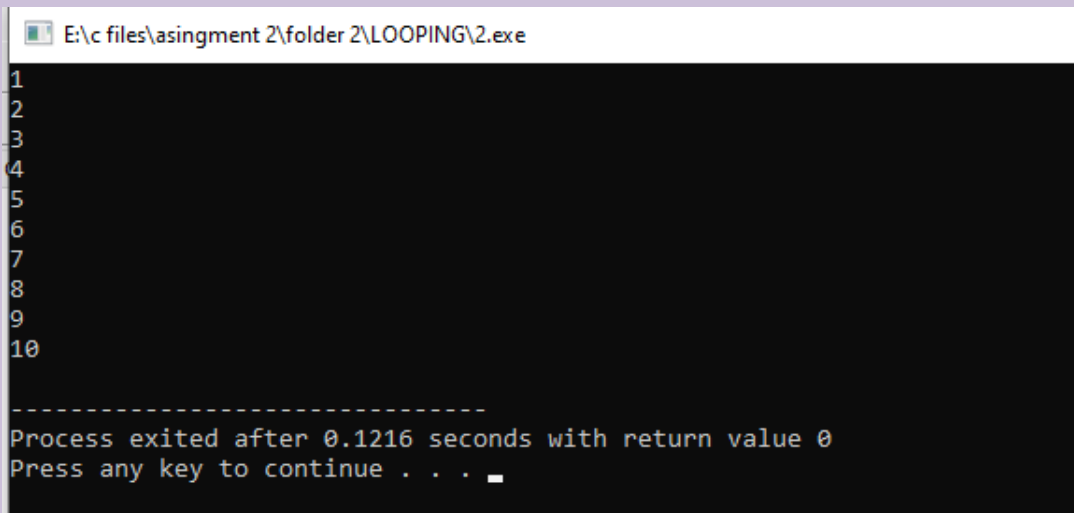
```
E:\c files\asingment 2\folder 2\LOOPING\1.exe
936
935
934
933
932
931
930
929
928
927
926
925
924
923
922
921
920
919
918
917
916
915
914
913
912
911
910
909
908
907
906
905
904
903
902
901
900
899
898
897
-----
Process exited after 0.06488 seconds with return value 0
Press any key to continue . . .
```



B ) WAP to take 10 no. Input from user and find out....

```
➤ #include<stdio.h>
main()
{
    int a;
    for(a=1;a<=10;a++)
    {
        printf("%d\n",a);
    }
}
```

### OUTPUT



```
E:\c files\asingment 2\folder 2\LOOPING\2.exe
1
2
3
4
5
6
7
8
9
10
-----
Process exited after 0.1216 seconds with return value 0
Press any key to continue . . .
```



### C) HOW many Even numbers are there.

```
➤ #include<stdio.h>
main()
{
    int a;
    for(a=1;a<=10;a++)
    {
        if(a%2==0)
        {
            printf("%d\n",a);
        }
    }
}
```

OUTPUT



```
E:\c files\asingment 2\folder 2\LOOPING\3.exe
2
4
6
8
10
-----
Process exited after 0.03654 seconds with return value 0
Press any key to continue . . .
```

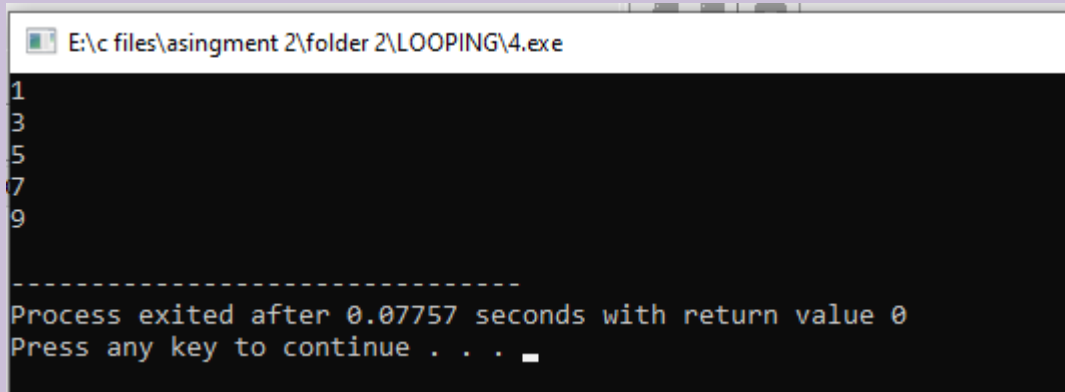
D) HOW many Odd numbers are there.

```
➤ #include<stdio.h>
main()
{
    int a;
    for(a=1;a<=10;a++)
    {
        if(a%2!=0)
        {
            printf("%d\n",a);
        }
    }
}
```



```
}  
}
```

## OUTPUT



```
E:\c files\asingment 2\folder 2\LOOPING\4.exe  
1  
3  
5  
7  
9  
-----  
Process exited after 0.07757 seconds with return value 0  
Press any key to continue . . .
```

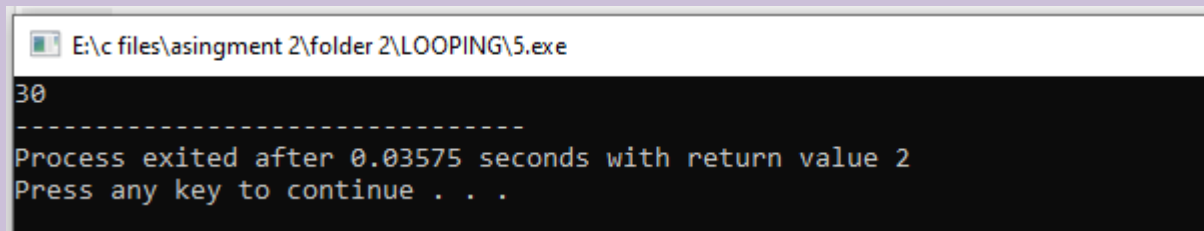
### E) SUM of Even Numbers.

```
➤ #include<stdio.h>  
main()  
{  
    int a,sum=0;  
    for(a=1;a<=10;a++)
```



```
{  
  
    if(a%2==0)  
    {  
        sum=sum+a;  
    }  
}  
printf("%d",sum);  
}
```

### OUTPUT



```
E:\c files\asingment 2\folder 2\LOOPING\5.exe  
30  
-----  
Process exited after 0.03575 seconds with return value 2  
Press any key to continue . . .
```

### E) SUM OF ODD NUMBERS

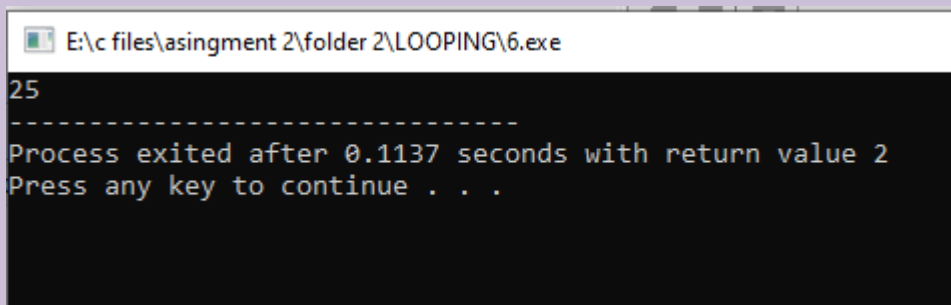
➤ `#include<stdio.h>`  
`main()`





```
{  
    int a,sum=0;  
    for(a=1;a<=10;a++)  
    {  
        if(a%2!=0)  
        {  
            sum=sum+a;  
        }  
    }  
    printf("%d",sum);  
}
```

### OUTPUT



```
E:\c files\asingment 2\folder 2\LOOPING\6.exe  
25  
-----  
Process exited after 0.1137 seconds with return value 2  
Press any key to continue . . .
```



## WAP TO PRINT TABLE UP TO GIVEN NUMBER

1) WAP to Print factorial of given number.

➤ #include<stdio.h>

```
main()
```

```
{
```

```
    int num, sum=1;
```

```
    printf("enter number to find factorial : ");
```

```
    scanf("%d",&num);
```

```
    printf("%d! = ",num);
```

```
    for(int i=num; i>=1; i--)
```

```
    {
```

```
        printf("%d",i);
```

```
        if(i>1)
```

```
        {
```

```
            printf("x");
```

```
        }
```

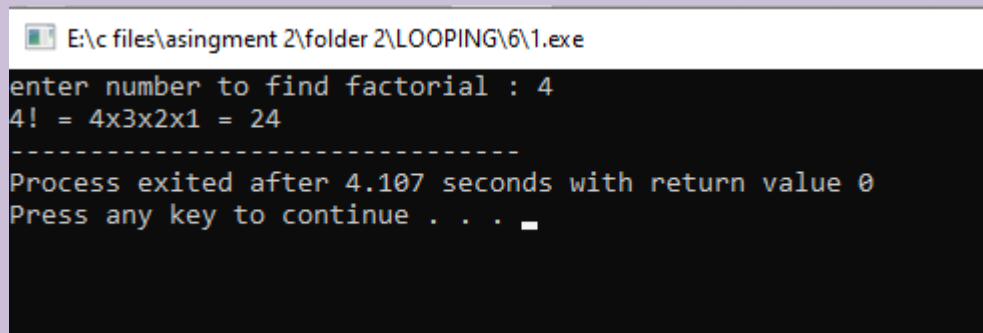


```

        sum *= i;
    }
    printf(" = %d ",sum);
}

```

### OUTPUT



```

E:\c files\asingment 2\folder 2\LOOPING\6\1.exe
enter number to find factorial : 4
4! = 4x3x2x1 = 24
-----
Process exited after 4.107 seconds with return value 0
Press any key to continue . . .

```

## 2) WAP to Fibonacci series up to given numbers

➤ #include<stdio.h>

```
main()
```

```
{
```

```
    int fibonum, zero=0, one=1, sum;
```

```
    printf("enter number to see fibonic series :");
```

```
    scanf("%d",&fibonum);
```



```
printf("%d \n",zero);  
printf("%d \n",one);  
  
for(int i=2; i<=fibonum; i++)  
{  
    sum = zero + one;  
    printf("%d \n",sum);  
    zero = one;  
    one = sum;  
}  
}
```

## OUTPUT



```
E:\c files\asingment 2\folder 2\LOOPING\6\second.exe
enter number to see fibonic series :15
0
1
1
2
3
5
8
13
21
34
55
89
144
233
377
610
-----
Process exited after 2.603 seconds with return value 0
Press any key to continue . . .
```

3) WAP to print numbers in revers order e.g.: number=64728---->reverse = 82746.

➤ #include<stdio.h>

main()

{

int num, reverse=0, modulo;

printf("enter numbers to find revers order :");

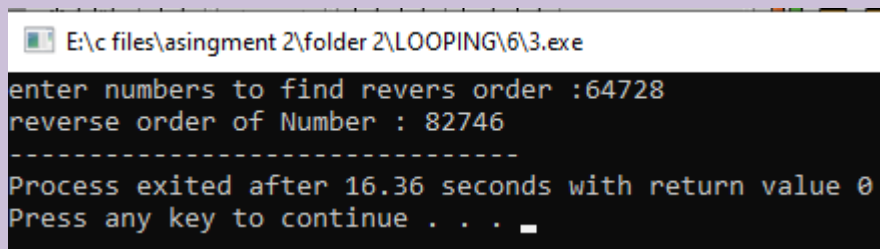


```

scanf("%d", &num);
for (int i=num; num!=0; num= num/10)
{
    modulo=num%10;
    reverse=reverse*10+modulo;
}
printf("reverse order of Number : %d",reverse);
}

```

### OUTPUT



```

E:\c files\asingment 2\folder 2\LOOPING\6\3.exe
enter numbers to find revers order :64728
reverse order of Number : 82746
-----
Process exited after 16.36 seconds with return value 0
Press any key to continue . . .

```

4) WAP To find out the max from given number (E.G...NO: -1562 max number is 6)

```

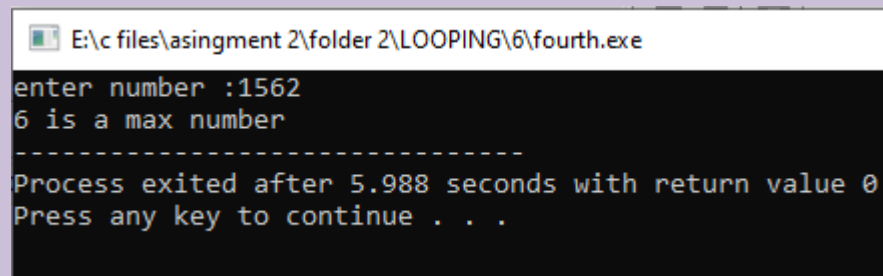
➤ #include<stdio.h>
main()
{

```



```
int num, max=0, modulo;  
printf("enter number :");  
scanf("%d",&num);  
for(int i=num; num!=0; num=num/10)  
{  
    modulo = num%10;  
    if(modulo>=max)  
    {  
        max = modulo;  
    }  
}  
printf("%d is a max number",max)  
return 0;  
}
```

### OUTPUT



```
E:\c files\asingment 2\folder 2\LOOPING\6\fourth.exe  
enter number :1562  
6 is a max number  
-----  
Process exited after 5.988 seconds with return value 0  
Press any key to continue . . .
```



5) WAP make a summation of given number (E.g.. 1532 ANS:-11)

➤ #include<stdio.h>

main()

{

int num, sum=0, modulo;

printf("enter number you summation:");

scanf("%d",&num);

for(int i=num; num!=0; num=num/10)

{

modulo = num%10;

sum +=modulo;

}

printf("summection of number : %d ", sum);

return 0;

}

OUTPUT





```
E:\c files\asingment 2\folder 2\LOOPING\6\5.exe
enter number yo find summation of first and last numbers :1532
summection of number : 11
-----
Process exited after 10.74 seconds with return value 0
Press any key to continue . . .
```

6) WAP you have to make a summation of first and last digit.(E.g..1234 ANS:-5)

➤ #include<stdio.h>

main()

{

int num, firstnum, lastnum, sum, modulo=11;

printf("enter number to find summation of first and last numbers :");

scanf("%d",&num);

for(int i=num; num!=0; num=num/10)

if(modulo==11)

{

modulo=num%10;

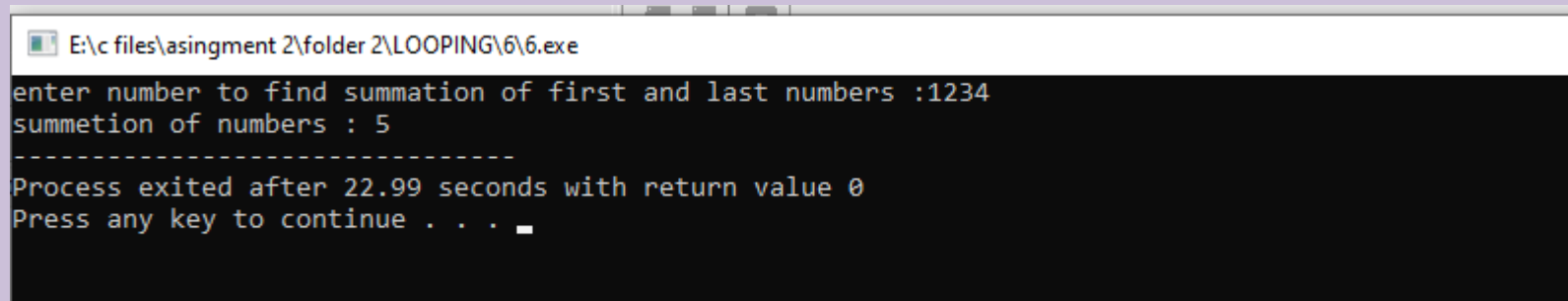
lastnum=modulo;

}



```
    else
    {
        modulo=num%10;
        firstnum=modulo;
    }
    sum=firstnum+lastnum;
    printf("summetion of numbers : %d",sum);
}
```

### OUTPUT



```
E:\c files\asingment 2\folder 2\LOOPING\6\6.exe
enter number to find summation of first and last numbers :1234
summetion of numbers : 5
-----
Process exited after 22.99 seconds with return value 0
Press any key to continue . . .
```

### PATTERNS :



1) 1  
10  
101  
1010  
10101

➤ #include<stdio.h>

main()

{

int zero=0, one=1, mod;

for(int i=1; i<=5; i++)

{

for(int j=1; j<=i; j++)

{

mod=j%2;

if(mod!=0)

{

printf("%d",one);

}else



```
        {  
            printf("%d",zero);  
        }  
    }  
    printf("\n");  
}  
  
return 0;  
  
}
```

### OUTPUT



```
E:\c files\asingment 2\folder 2\LOOPING\patterns\first.exe  
1  
10  
101  
1010  
10101  
-----  
Process exited after 0.06659 seconds with return value 0  
Press any key to continue . . .
```



2) A  
BC  
DEF  
GHIJ  
KLMNO

➤ `#include<stdio.h>`

`main()`

`{`

`char alphabet = 'A';`

`for(int i=1; i<=5; i++)`

`{`

`for(int j=1; j<=i; j++)`

`{`

`printf("%c",alphabet);`

`alphabet++;`

`}`

`printf("\n");`

`}`



```
return 0;
```

```
}
```

## OUTPUT

```
E:\c files\asingment 2\folder 2\LOOPING\patterns\2.exe
A
BC
DEF
GHIJ
KLMNO

-----
Process exited after 0.1477 seconds with return value 0
Press any key to continue . . .
```

3) 1

23

456

78910

1112131415



```
#include<stdio.h>
main()
{
    int i,j, c=1, n;
    printf("enter number of terms\n");
    scanf("%d",&n);
    for(i=1;i<=n;i++)
    {
        for(j=1;j<=i;j++)
        {
            printf("%d",c);
            c++;
        }
        printf("\n");
    }
}
```

### OUTPUT



```
E:\c files\asingment 2\folder 2\LOOPING\patterns\11.exe
enter number of terms
5
1
23
456
78910
1112131415

-----
Process exited after 2.487 seconds with return value 0
Press any key to continue . . .
```

4) A

ABC

ABCD

ABCDE

➤ #include<stdio.h>

main()

{

int i, j, n;

printf("enter the no of lines \n");

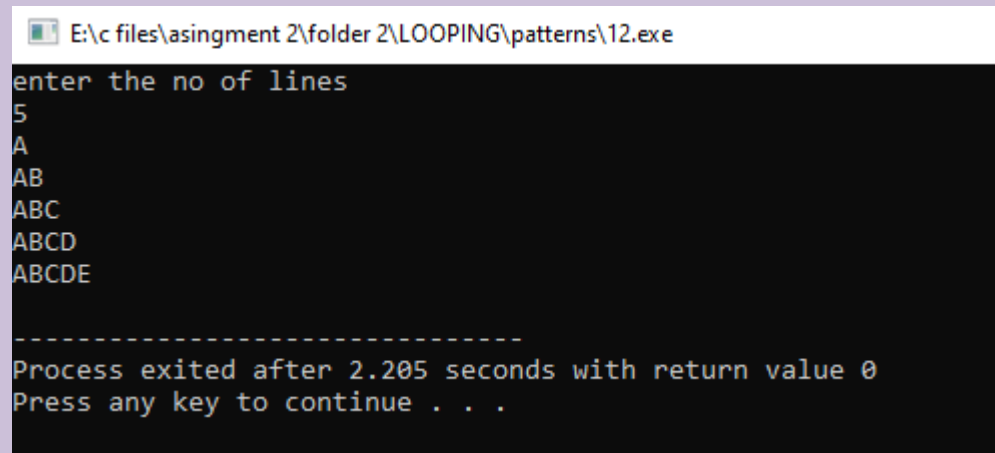
scanf("%d",&n);





```
for(i=1;i<=n;i++)  
{  
    for(j=1;j<=i;j++)  
    {  
        printf("%c",(char)(j+64));  
    }  
    printf("\n");  
}  
}
```

### OUTPUT



```
E:\c files\asingment 2\folder 2\LOOPING\patterns\12.exe  
enter the no of lines  
5  
A  
AB  
ABC  
ABCD  
ABCDE  
  
-----  
Process exited after 2.205 seconds with return value 0  
Press any key to continue . . .
```



5) \*

\*\*

\*\*\*

\*\*\*\*

\*\*\*\*\*

\*\*\*\*\*

\*\*\*\*\*

\*\*\*\*

\*\*\*

\*\*

\*

➤ #include<stdio.h>

main()

{

for(int i=1; i<=11; i++)

{

if(i<=6)

{

for(int j=1; j<=i; j++)



```
        {  
            printf("*");  
        }  
    }else  
    {  
        for(int j=11; j>=i; j--)  
        {  
            printf("*");  
        }  
    }  
    printf("\n");  
}  
}
```

OUTPUT



```
E:\c files\asingment 2\folder 2\LOOPING\patterns\15.exe
*
**
***
****
*****
*****
*****
*****
****
***
**
*

-----
Process exited after 0.04181 seconds with return value 0
Press any key to continue . . .
```

6)

```
      *
     ***
    *****
   *** *****
  ** *****
```

➤ `#include<stdio.h>`  
`main()`



```
{  
    int rows = 5;  
    for (int i=0; i<rows; i++)  
    {  
        for(int j=0; j<2*(rows-i)-1; j++)  
        {  
            printf(" ");  
        }  
        for(int k=0; k<(2*i)+1; k++)  
        {  
            printf("* ");  
        }  
        printf("\n");  
    }  
    return 0;  
}
```

### OUTPUT



```
E:\c files\asingment 2\folder 2\LOOPING\patterns\17.exe

      *
     ***
    *****
   *********
  ***********
 *****
*****

-----
Process exited after 0.05134 seconds with return value 0
Press any key to continue . . .
```

