

## **Practical-1**

### **Aim: 1**

**12**

**123**

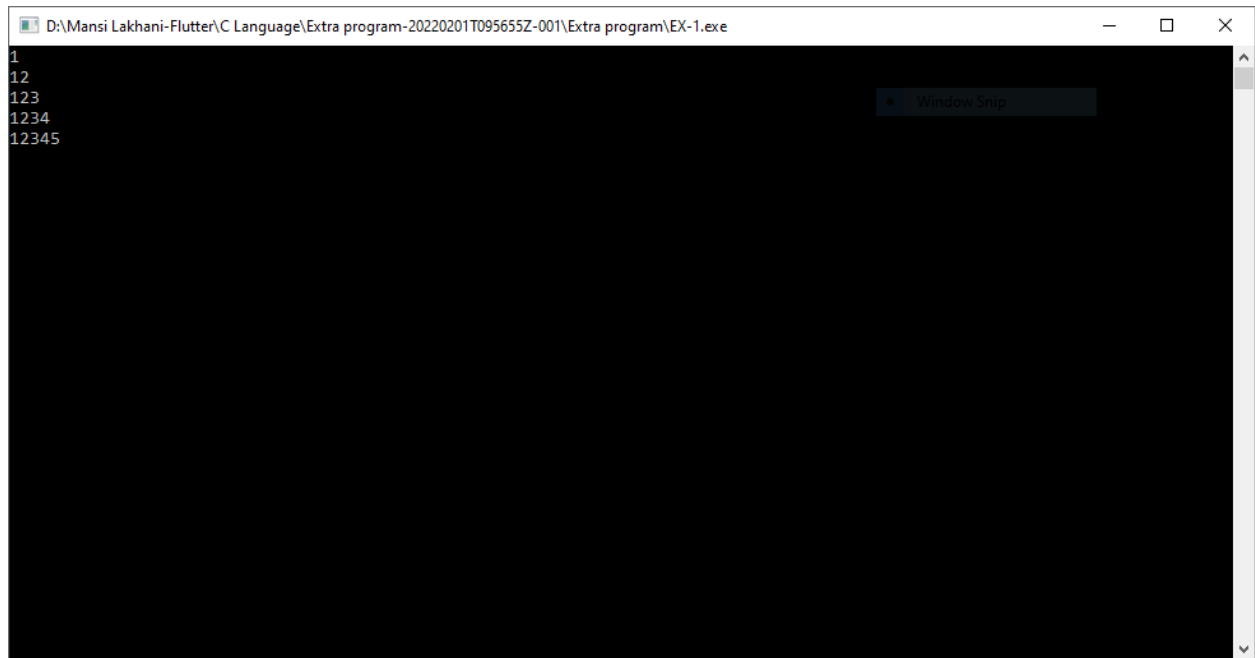
**1234**

**12345**

### **Program:**

```
#include<stdio.h>
#include<conio.h>
main()
{
    int i,j;
    clrscr();
    for(i=1;i<=5;i++)
    {
        for(j=1;j<=i;j++)
        {
            printf("%d",j);
        }
        printf("\n");
    }
    getch();
}
```

## Output:



```
D:\Mansi Lakhani-Flutter\C Language\Extra program-20220201T095655Z-001\Extra program\EX-1.exe
1
12
123
1234
12345
```

## Practical-2

**Aim: 12345**

**1234**

**123**

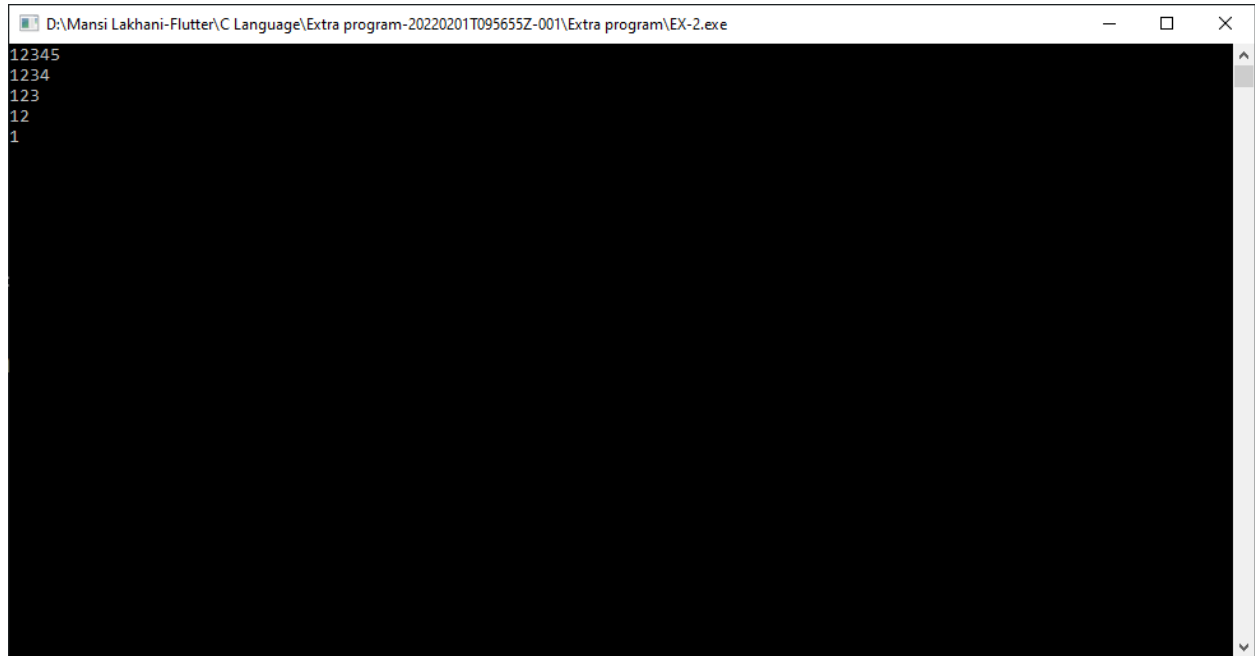
**12**

**1**

**Program:**

```
#include<stdio.h>
#include<conio.h>
main()
{
    int i,j;
    clrscr();
    for(i=5;i>=1;i--)
    {
        for(j=1;j<=i;j++)
        {
            printf("%d",j);
        }
        printf("\n");
    }
    getch();
}
```

## Output:



```
D:\Mansi Lakhani-Flutter\C Language\Extra program-20220201T095655Z-001\Extra program\EX-2.exe
12345
1234
123
12
1
```

## **Practical-3**

**Aim: 5**

**54**

**543**

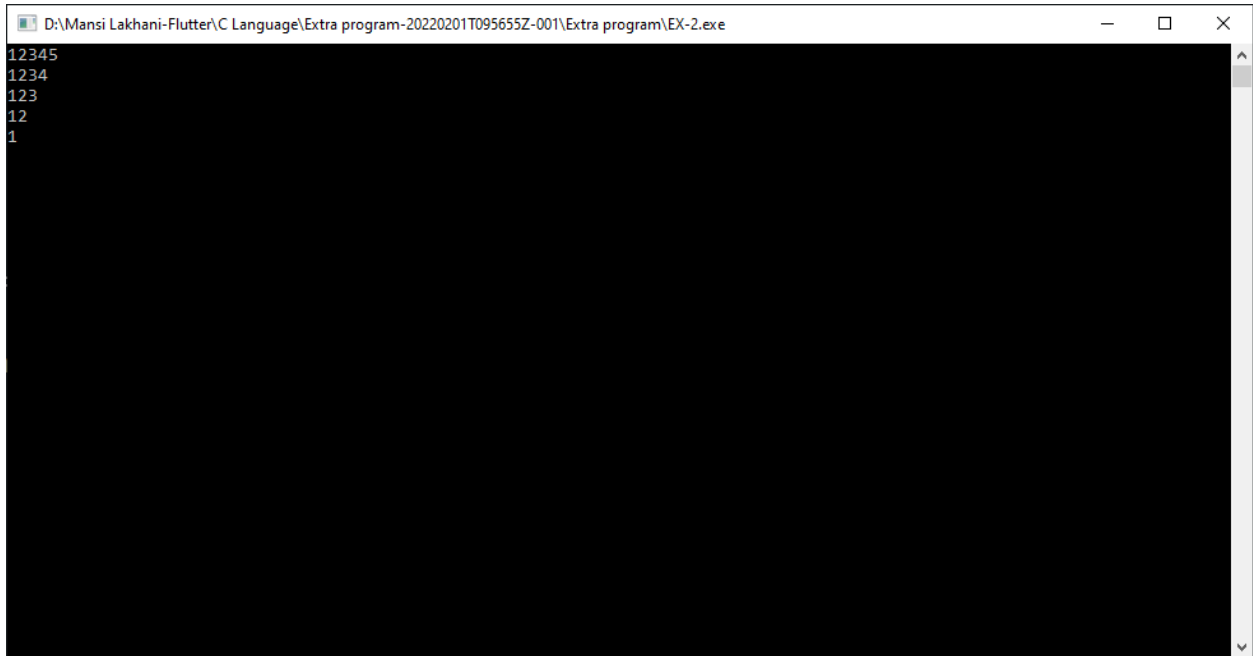
**5432**

**54321**

**Program:**

```
#include<stdio.h>
#include<conio.h>
main()
{
    int i,j;
    clrscr();
    for(i=5;i>=1;i--)
    {
        for(j=5;j>=i;j--)
        {
            printf("%d",j);
        }
        printf("\n");
    }
    getch();
}
```

## Output:



```
D:\Mansi Lakhani-Flutter\C Language\Extra program-20220201T095655Z-001\Extra program\EX-2.exe
12345
1234
123
12
1
```

## **Practical-4**

**Aim: 1**

**21**

**321**

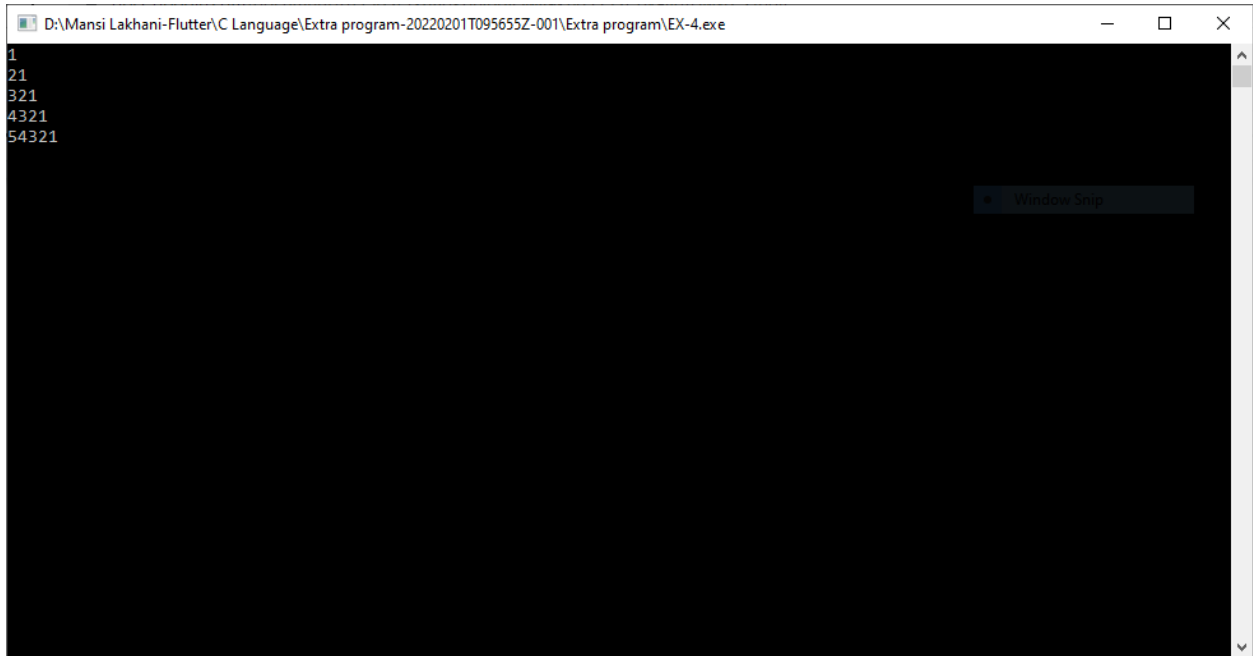
**4321**

**54321**

**Program:**

```
#include<stdio.h>
#include<conio.h>
main()
{
    int i,j;
    clrscr();
    for(i=1;i<=5;i++)
    {
        for(j=i;j>=1;j--)
        {
            printf("%d",j);
        }
        printf("\n");
    }
    getch();
}
```

## Output:



```
D:\Mansi Lakhani-Flutter\C Language\Extra program-20220201T095655Z-001\Extra program\EX-4.exe
1
21
321
4321
54321
```



## **Practical-5**

**Aim: 54321**

**5432**

**432**

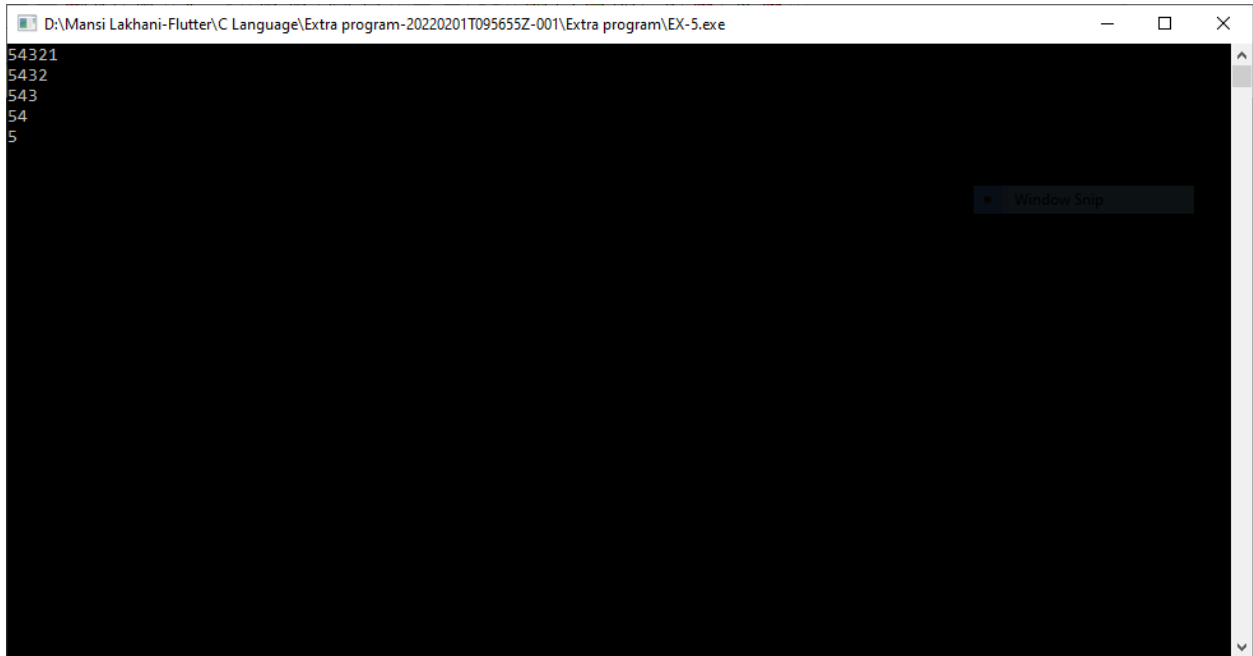
**54**

**5**

**Program:**

```
#include<stdio.h>
#include<conio.h>
main()
{
    int i,j;
    clrscr();
    for(i=1;i<=5;i++)
    {
        for(j=5;j>=i;j--)
        {
            printf("%d",j);
        }
        printf("\n");
    }
    getch();
}
```

## Output:



```
D:\Mansi Lakhani-Flutter\C Language\Extra program-20220201T095655Z-001\Extra program\EX-5.exe
54321
5432
543
54
5
```

## **Practical-6**

**Aim: 54321**

**4321**

**321**

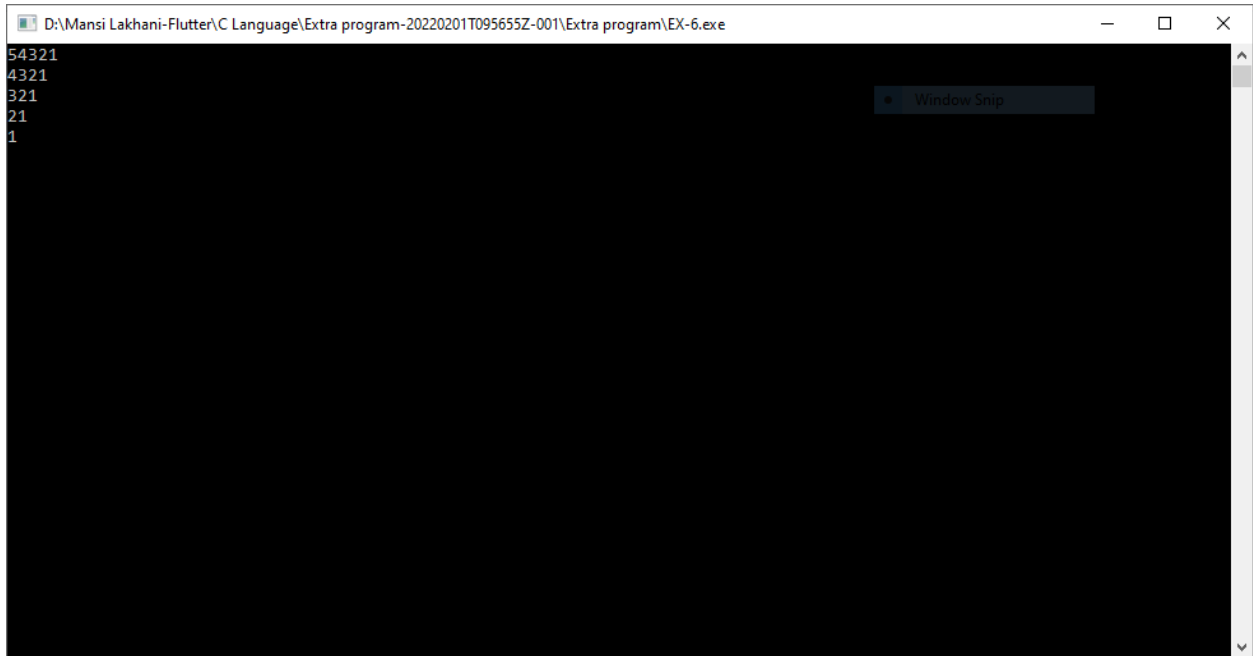
**21**

**1**

**Program:**

```
#include<stdio.h>
#include<conio.h>
main()
{
    int i,j;
    clrscr();
    for(i=5;i>=1;i--)
    {
        for(j=i;j>=1;j--)
        {
            printf("%d",j);
        }
        printf("\n");
    }
    getch();
}
```

## Output:



```
D:\Mansi Lakhani-Flutter\C Language\Extra program-20220201T095655Z-001\Extra program\EX-6.exe
54321
4321
321
21
1
```

## Practical-7

**Aim: 12345**

**2345**

**345**

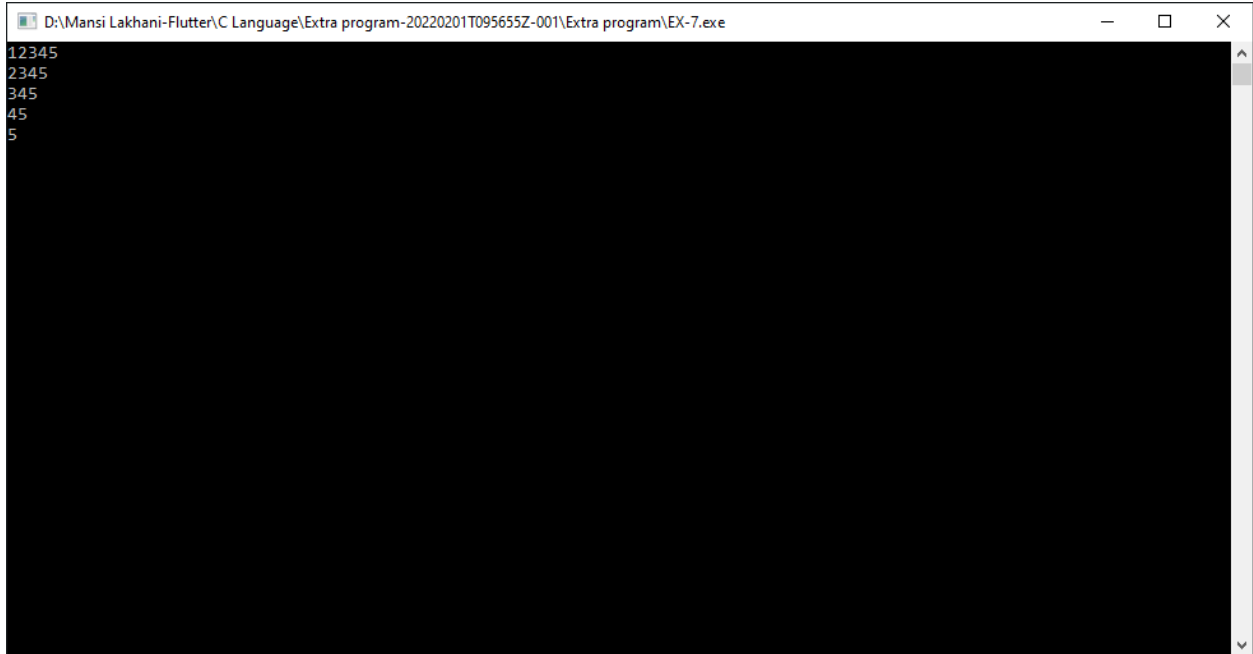
**45**

**5**

**Program:**

```
#include<stdio.h>
#include<conio.h>
main()
{
    int i,j;
    clrscr();
    for(i=1;i<=5;i++)
    {
        for(j=i;j<=5;j++)
        {
            printf("%d",j);
        }
        printf("\n");
    }
    getch();
}
```

## Output:



```
D:\Mansi Lakhani-Flutter\C Language\Extra program-20220201T095655Z-001\Extra program\EX-7.exe
12345
2345
345
45
5
```

## Practical-8

Aim: 45

4546

454647

45464748

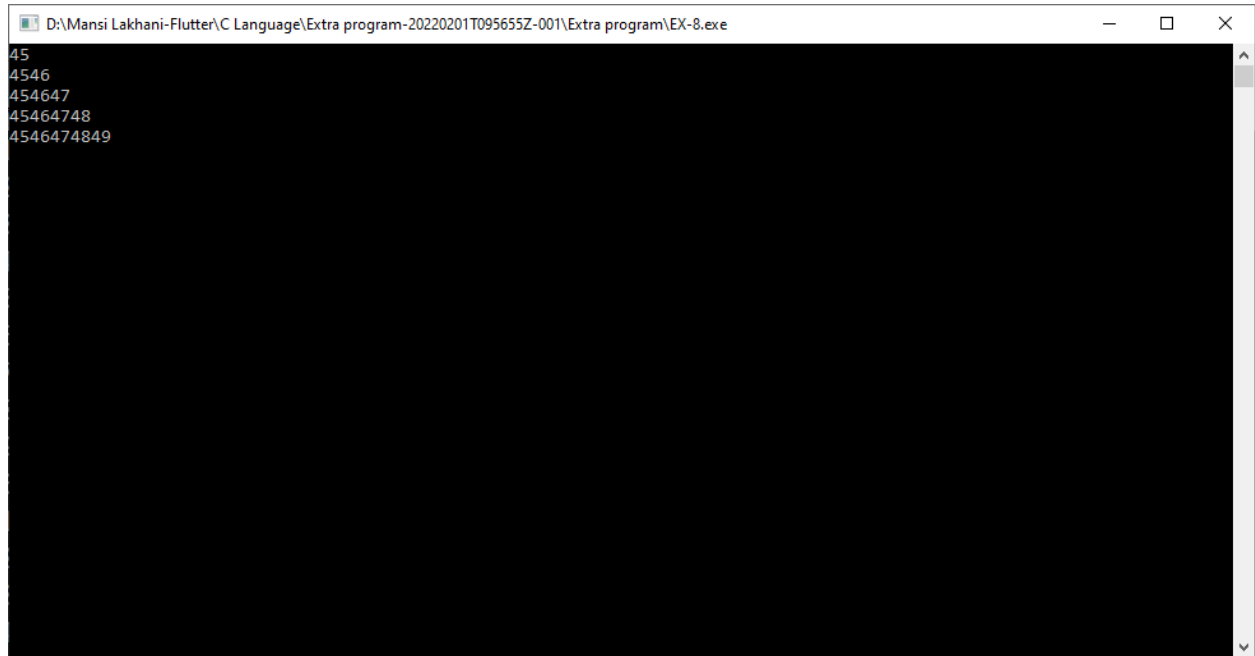
4546474849

Program:

```
#include<stdio.h>
#include<conio.h>
main()
{
    int i,j;

    for(i=45;i<=49;i++)
    {
        for(j=45;j<=i;j++)
        {
            printf("%d",j);
        }
        printf("\n");
    }
    getch();
}
```

## Output:



```
D:\Mansi Lakhani-Flutter\C Language\Extra program-20220201T095655Z-001\Extra program\EX-8.exe
45
4546
454647
45464748
4546474849
```



## Practical-9

**Aim: 1**

**22**

**333**

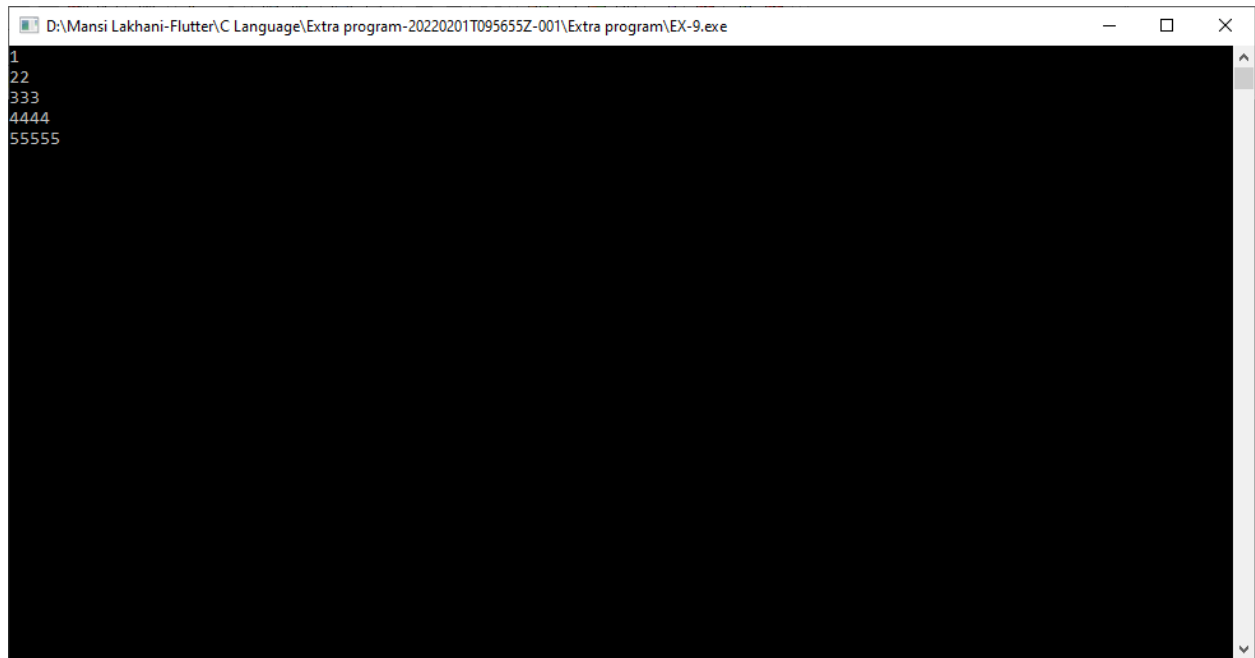
**4444**

**55555**

**Program:**

```
#include<stdio.h>
#include<conio.h>
main()
{
    int i,j;
    clrscr();
    for(i=1;i<=5;i++)
    {
        for(j=1;j<=i;j++)
        {
            printf("%d",i);
        }
        printf("\n");
    }
    getch();
}
```

## Output:



A screenshot of a Windows command prompt window. The title bar at the top reads "D:\Mansi Lakhani-Flutter\C Language\Extra program-20220201T095655Z-001\Extra program\EX-9.exe". The window contains the following output:

```
1
22
333
4444
55555
```

## **Practical-10**

**Aim: 5**

**44**

**333**

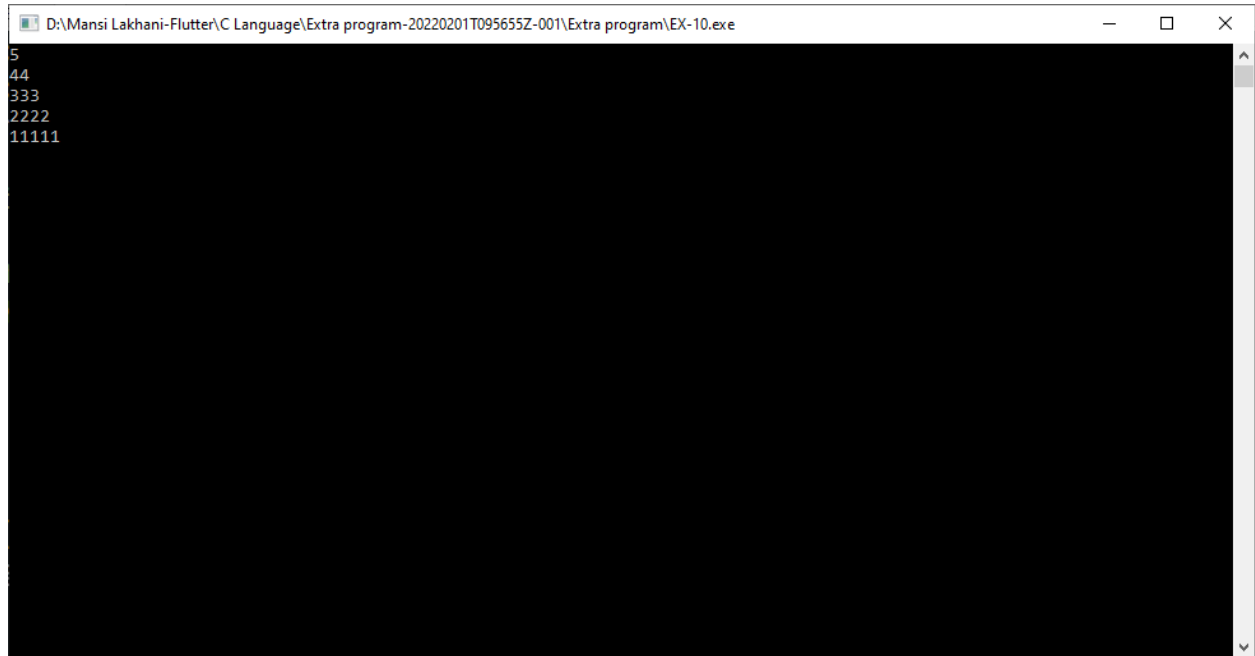
**2222**

**11111**

**Program:**

```
#include<stdio.h>
#include<conio.h>
main()
{
    int i,j;
    clrscr();
    for(i=5;i>=1;i--)
    {
        for(j=5;j>=i;j--)
        {
            printf("%d",i);
        }
        printf("\n");
    }
    getch();
}
```

## Output:



A screenshot of a Windows command prompt window. The title bar at the top reads "D:\Mansi Lakhani-Flutter\C Language\Extra program-20220201T095655Z-001\Extra program\EX-10.exe". The window contains the following output:

```
5
44
333
2222
11111
```

## **Practical-11**

**Aim: 1**

**12**

**123**

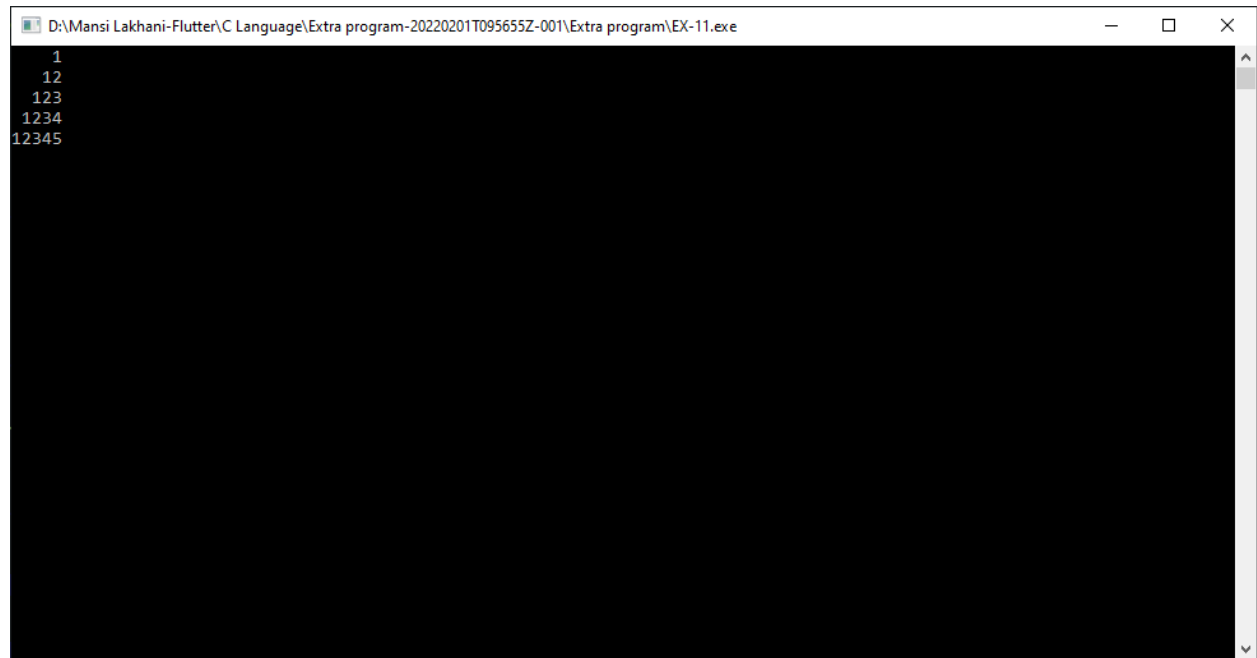
**1234**

**12345**

**Program:**

```
#include<stdio.h>
#include<conio.h>
main()
{
    int i,j,k;
    clrscr();
    for(i=1;i<=5;i++)
    {
        for(k=5;k>i;k--)
        {
            printf(" ");
        }
        for(j=1;j<=i;j++)
        {
            printf("%d",j);
        }
        printf("\n");
    }
    getch();
}
```

## Output:



```
D:\Mansi Lakhani-Flutter\C Language\Extra program-20220201T095655Z-001\Extra program\EX-11.exe
1
12
123
1234
12345
```

## Practical-12

Aim: 12345

1234

123

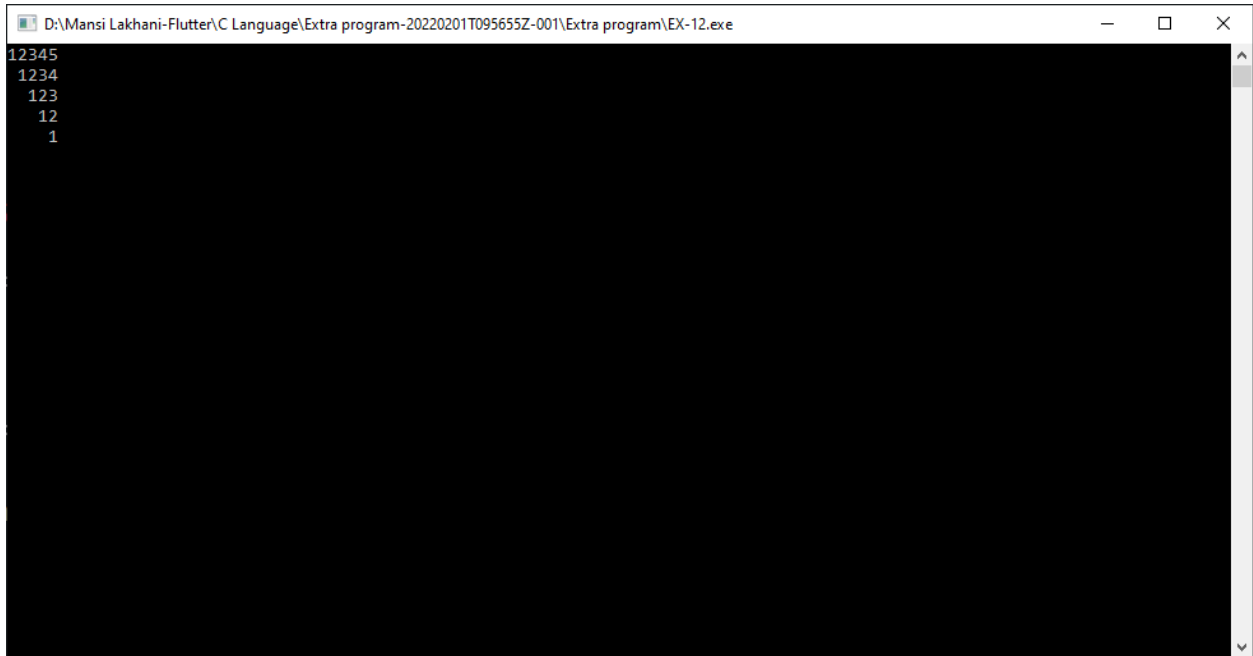
12

1

Program:

```
#include<stdio.h>
#include<conio.h>
main()
{
    int i,j,k;
    clrscr();
    for(i=5;i>=1;i--)
    {
        for(k=5;k>i;k--)
        {
            printf(" ");
        }
        for(j=1;j<=i;j++)
        {
            printf("%d",j);
        }
        printf("\n");
    }
    getch();
}
```

## Output:



```
D:\Mansi Lakhani-Flutter\C Language\Extra program-20220201T095655Z-001\Extra program\EX-12.exe
12345
 1234
   123
    12
     1
```

\



## Practical-13

**Aim:** 12345

234 5

345

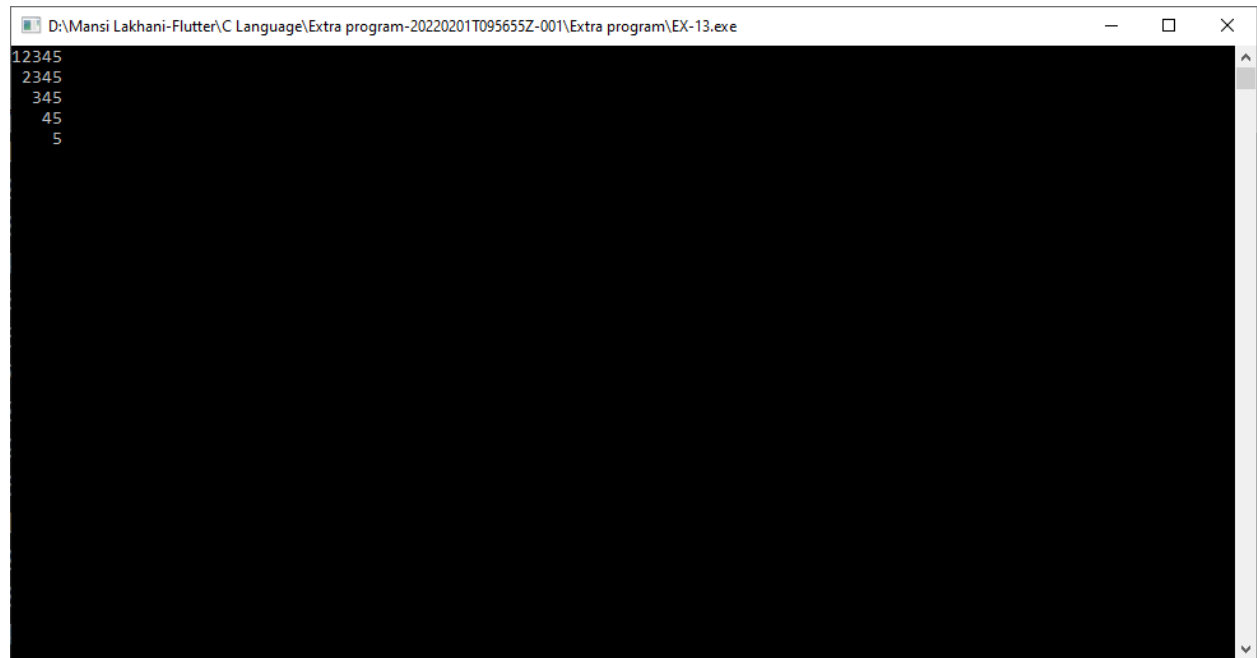
45

5

### **Program:**

```
#include<stdio.h>
#include<conio.h>
main()
{
    int i,j,k;
    clrscr();
    for(i=1;i<=5;i++)
    {
        for(k=1;k<i;k++)
        {
            printf(" ");
        }
        for(j=i;j<=5;j++)
        {
            printf("%d",j);
        }
        printf("\n");
    }
    getch();
}
```

## Output:



```
D:\Mansi Lakhani-Flutter\C Language\Extra program-20220201T095655Z-001\Extra program\EX-13.exe
12345
 2345
  345
   45
    5
```

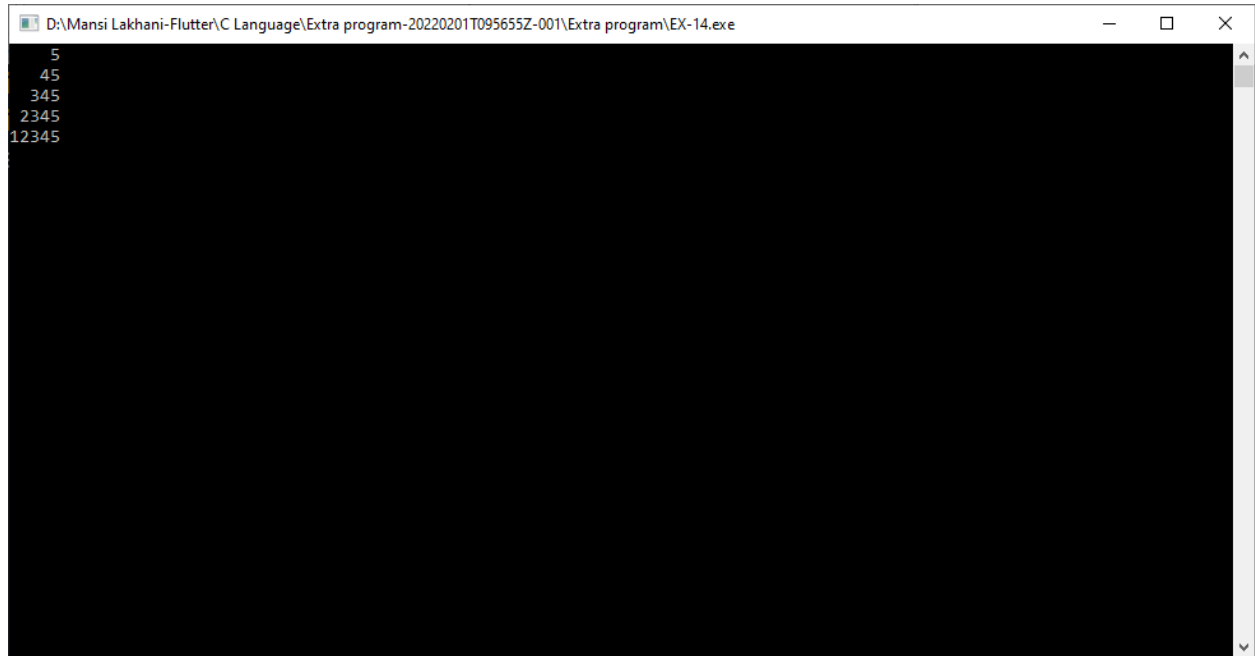
## **Practical-14**

**Aim:**        5  
                 4 5  
                 345  
                 2345  
                 12345

### **Program:**

```
#include<stdio.h>
#include<conio.h>
main()
{
    int i,j,k;
    clrscr();
    for(i=5;i>=1;i--)
    {
        for(k=i;k>1;k--)
        {
            printf(" ");
        }
        for(j=i;j<=5;j++)
        {
            printf("%d",j);
        }
        printf("\n");
    }
    getch();
}
```

## Output:



```
D:\Mansi Lakhani-Flutter\C Language\Extra program-20220201T095655Z-001\Extra program\EX-14.exe
5
45
345
2345
12345
```

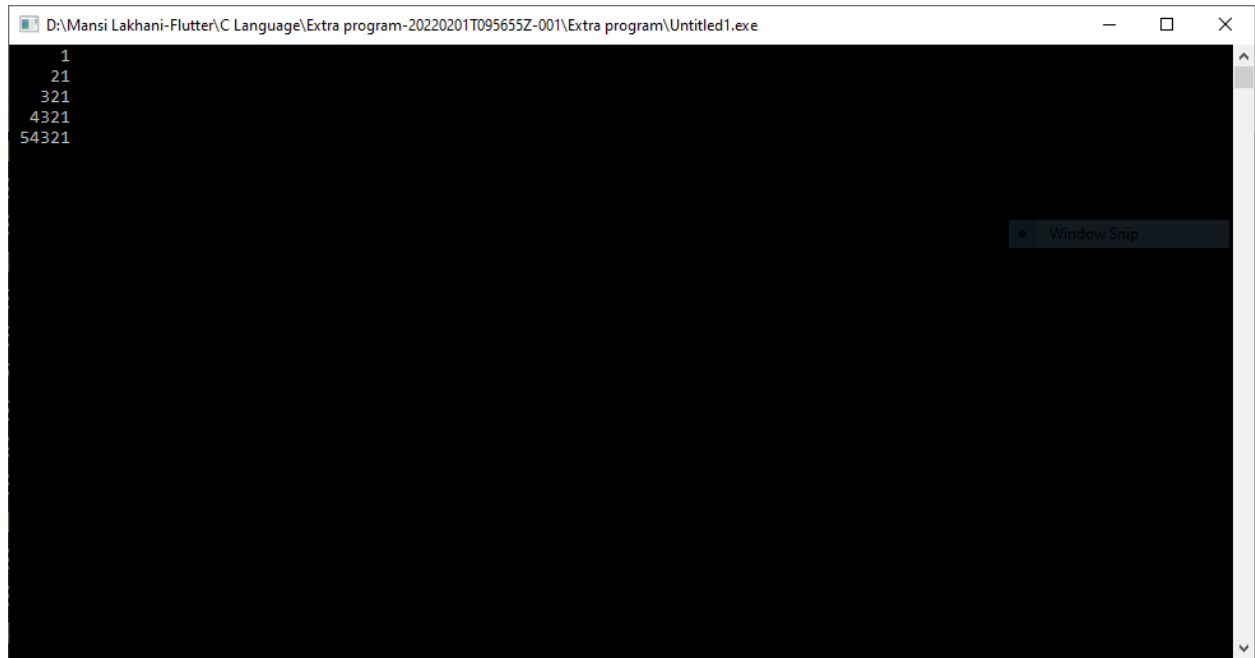
## **Practical-15**

**Aim:**        1  
                  21  
                  321  
                  4321  
                  54321

### **Program:**

```
#include<stdio.h>
#include<conio.h>
main()
{
    int i,j,k;
    clrscr();
    for(i=1;i<=5;i++)
    {
        for(k=5;k>=i;k--)
        {
            printf(" ");
        }
        for(j=i;j>=1;j--)
        {
            printf("%d",j);
        }
        printf("\n");
    }
    getch();
}
```

## Output:



```
D:\Mansi Lakhani-Flutter\C Language\Extra program-20220201T095655Z-001\Extra program\Untitled1.exe
1
21
321
4321
54321
```

## **Practical-16**

### **Aim:**

1  
12  
123  
1234  
12345  
1234  
123  
12  
1

### **Program:**

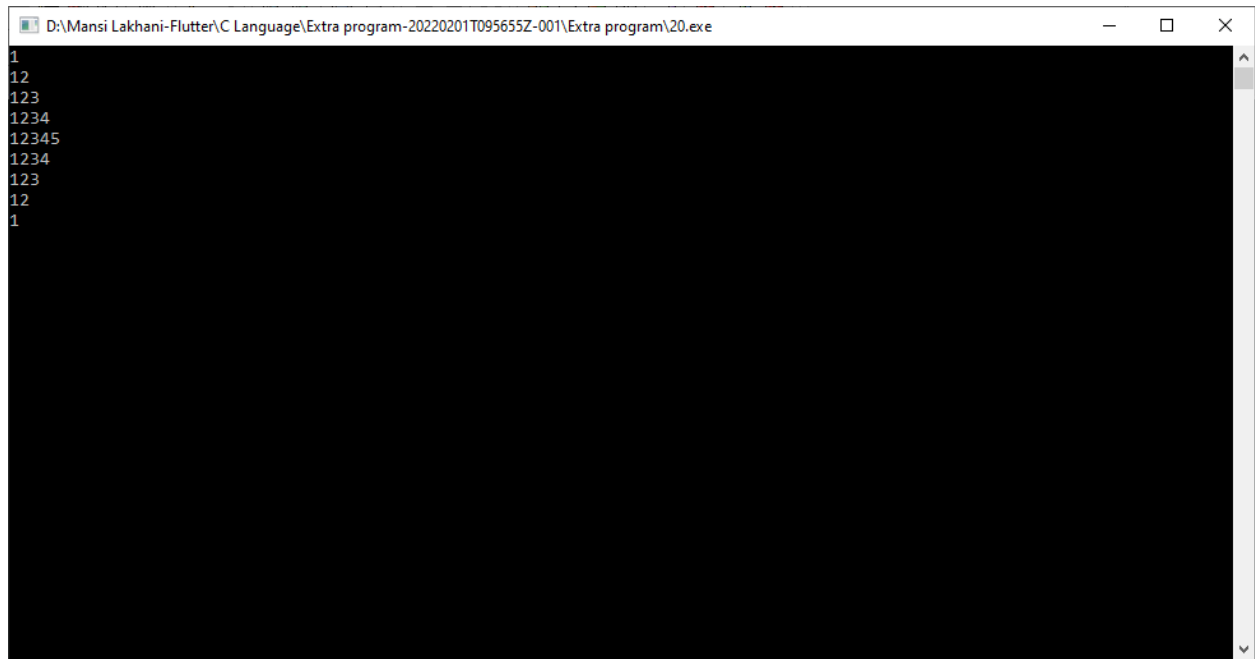
```
#include<stdio.h>
#include<conio.h>
main()
{
    int i,j;

    for(i=1;i<=5;i++)
    {
        for(j=1;j<=i;j++)
        {
            printf("%d",j);
        }
        printf("\n");
    }
    for(i=4;i>=1;i--)
    {
        for(j=1;j<=i;j++)
        {
```

```
        printf("%d",j);
    }
    printf("\n");
}
getch();
}
```



## Output:



```
D:\Mansi Lakhani-Flutter\C Language\Extra program-20220201T095655Z-001\Extra program\20.exe
1
12
123
1234
12345
1234
123
12
1
```

## Practical-17

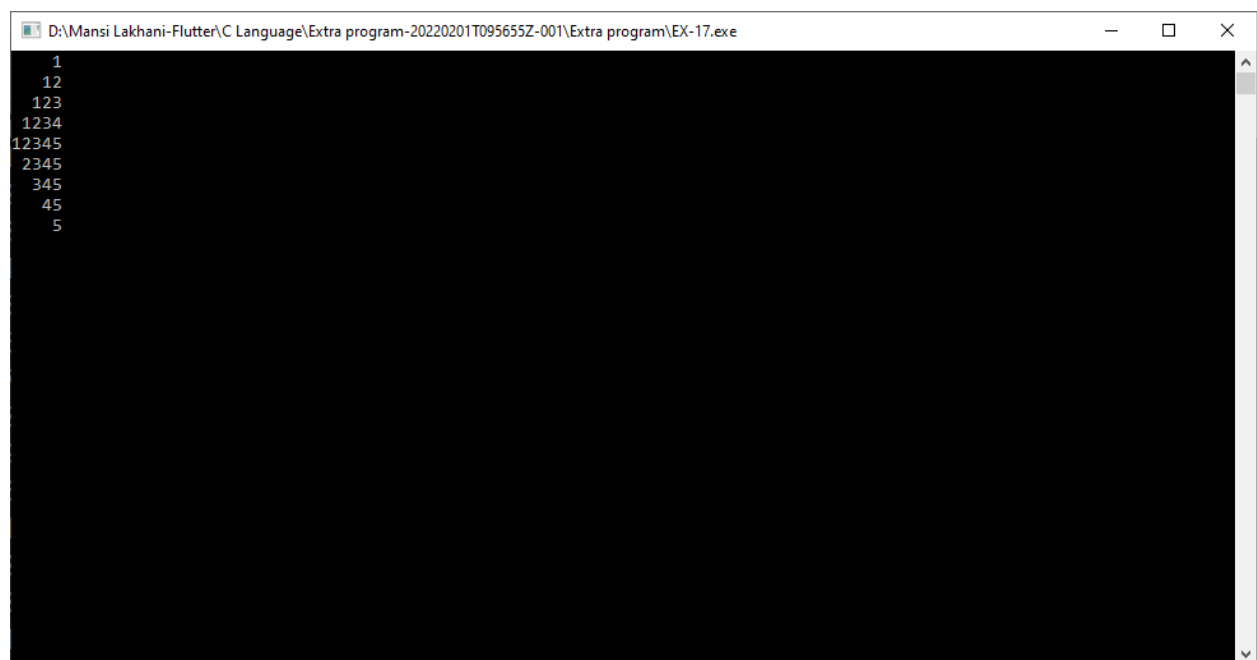
**Aim:**            1  
                     12  
                     123  
                     1234  
                     12345  
                     2345  
                     345  
                     45  
                     5

### **Program:**

```
#include<stdio.h>
#include<conio.h>
main()
{
    int i,j,k;
    clrscr();
    for(i=1;i<=5;i++)
    {
        for(k=5;k>i;k--)
        {
            printf(" ");
        }
        for(j=1;j<=i;j++)
        {
            printf("%d",j);
        }
        printf("\n");
    }
    for(i=2;i<=5;i++)
    {
        for(k=1;k<i;k++)
        {
            printf(" ");
        }
    }
}
```

```
    }  
    for(j=i;j<=5;j++)  
    {  
        printf("%d",j);  
    }  
    printf("\n");  
}  
getch();  
}
```

## Output:



```
D:\Mansi Lakhani-Flutter\C Language\Extra program-20220201T095655Z-001\Extra program\EX-17.exe  
1  
12  
123  
1234  
12345  
2345  
345
```

## Practical-18

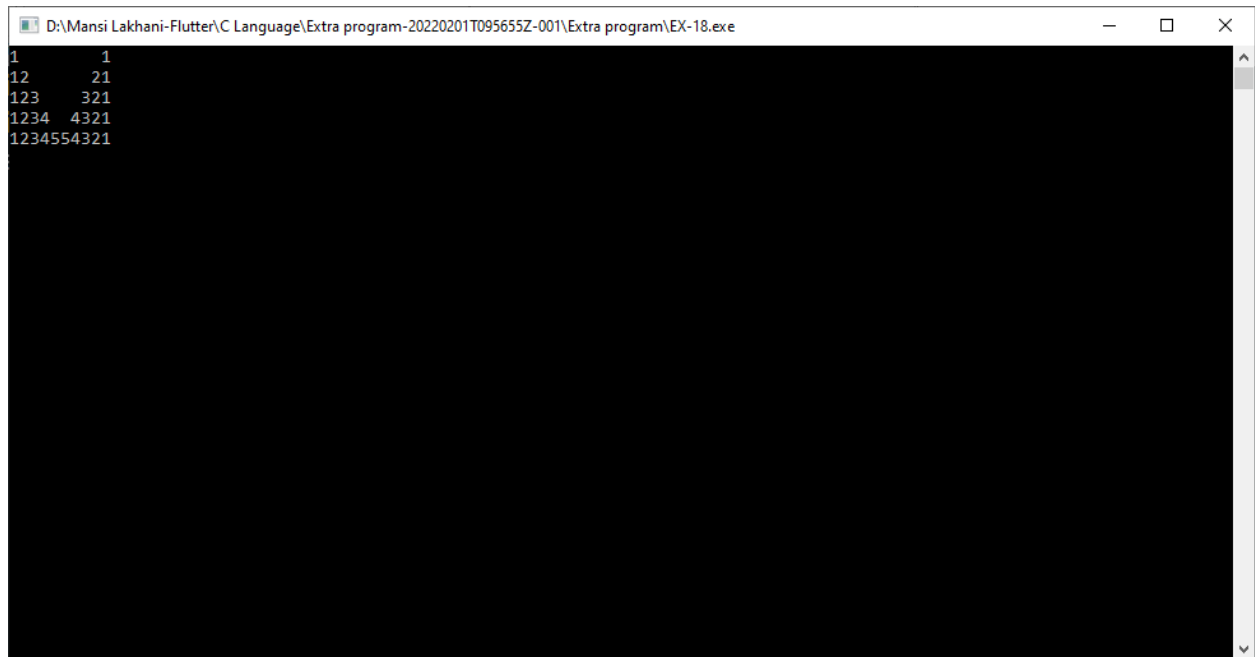
**Aim:    1        1  
          12      21  
          123    321  
          1234   4321  
          1234554321**

### **Program:**

```
#include<stdio.h>
#include<conio.h>
main()
{
    int i,j,k,l,m;
    clrscr();
    for(i=1;i<=5;i++)
    {
        for(j=1;j<=i;j++)
        {
            printf("%d",j);
        }
        for(k=i;k<5;k++)
        {
            printf(" ");
        }
        for(l=5;l>i;l--)
        {
            printf(" ");
        }
        for(m=i;m>=1;m--)
        {
            printf("%d",m);
        }
        printf("\n");
    }
    getch();
}
```

}

## **Output:**



```
D:\Mansi Lakhani-Flutter\C Language\Extra program-20220201T095655Z-001\Extra program\EX-18.exe
1
12 21
123 321
1234 4321
1234554321
```

## Practical-19

Aim:1234554321

1234 4321

123 321

12 21

1 1

12 21

123 321

1234 4321

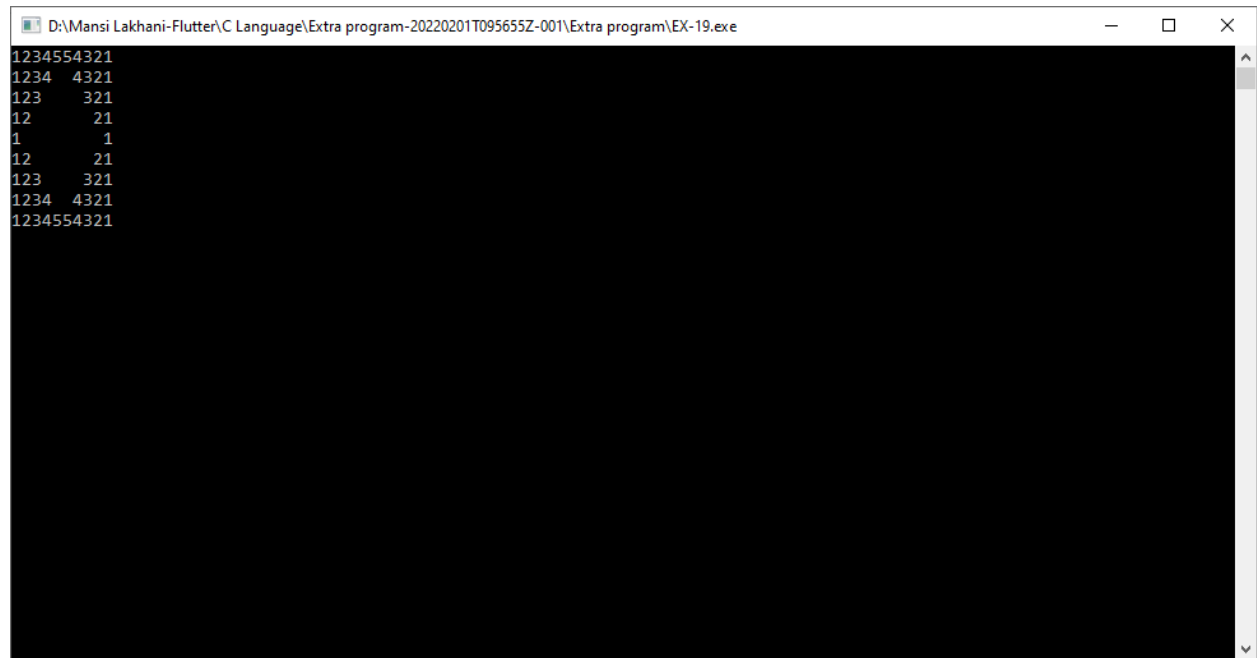
1234554321

### Program:

```
#include<stdio.h>
#include<conio.h>
main()
{
    int i,j,k,l,m;
    clrscr();
    for(i=5;i>=1;i--)
    {
        for(j=1;j<=i;j++)
        {
            printf("%d",j);
        }
        for(k=i;k<5;k++)
        {
            printf(" ");
        }
        for(l=i;l<5;l++)
        {
            printf(" ");
        }
    }
}
```

```
    }
    for(m=i;m>=1;m--)
    {
        printf("%d",m);
    }
    printf("\n");
}
for(i=2;i<=5;i++)
{
    for(j=1;j<=i;j++)
    {
        printf("%d",j);
    }
    for(k=5;k>i;k--)
    {
        printf(" ");
    }
    for(l=5;l>i;l--)
    {
        printf(" ");
    }
    for(m=i;m>=1;m--)
    {
        printf("%d",m);
    }
    printf("\n");
}
getch();
}
```

## Output:



```
D:\Mansi Lakhani-Flutter\C Language\Extra program-20220201T095655Z-001\Extra program\EX-19.exe
1234554321
1234 4321
123 321
12 21
1 1
12 21
123 321
1234 4321
1234554321
```



## **Practical-20**

### **Aim:**

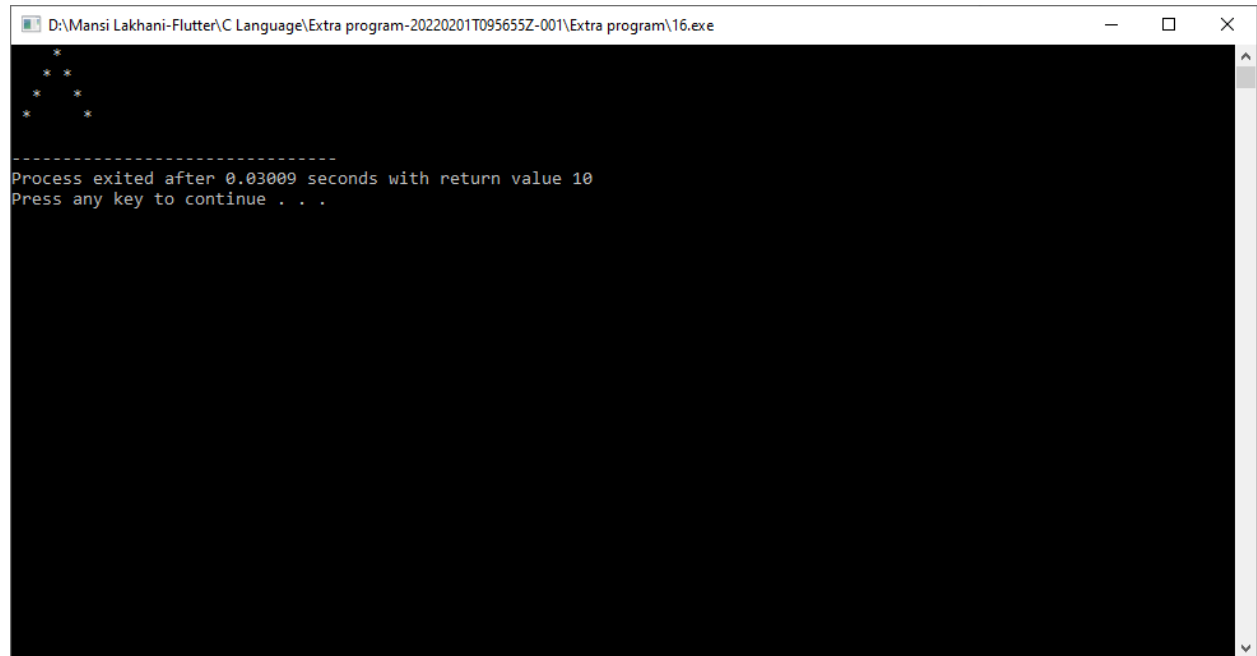
```
*  
* *  
* *  
* *
```

### **Program:**

```
#include<stdio.h>  
#include<conio.h>  
main()  
{  
    int i,j,k=5,l=5;  
    clrscr();  
    for(i=1;i<=4;i++)  
    {  
  
        for(j=1;j<=10;j++)  
        {  
            if(j==k || j==1)  
            {  
                printf("*");  
            }  
            else  
            {  
                printf(" ");  
            }  
        }  
        k--;  
        l++;  
    }  
}
```

```
        printf("\n");  
    }  
}
```

## Output:



```
D:\Mansi Lakhani-Flutter\C Language\Extra program-20220201T095655Z-001\Extra program\16.exe  
  *  
 * *  
* * *  
* * *  
-----  
Process exited after 0.03009 seconds with return value 10  
Press any key to continue . . .
```

## **Practical-21**

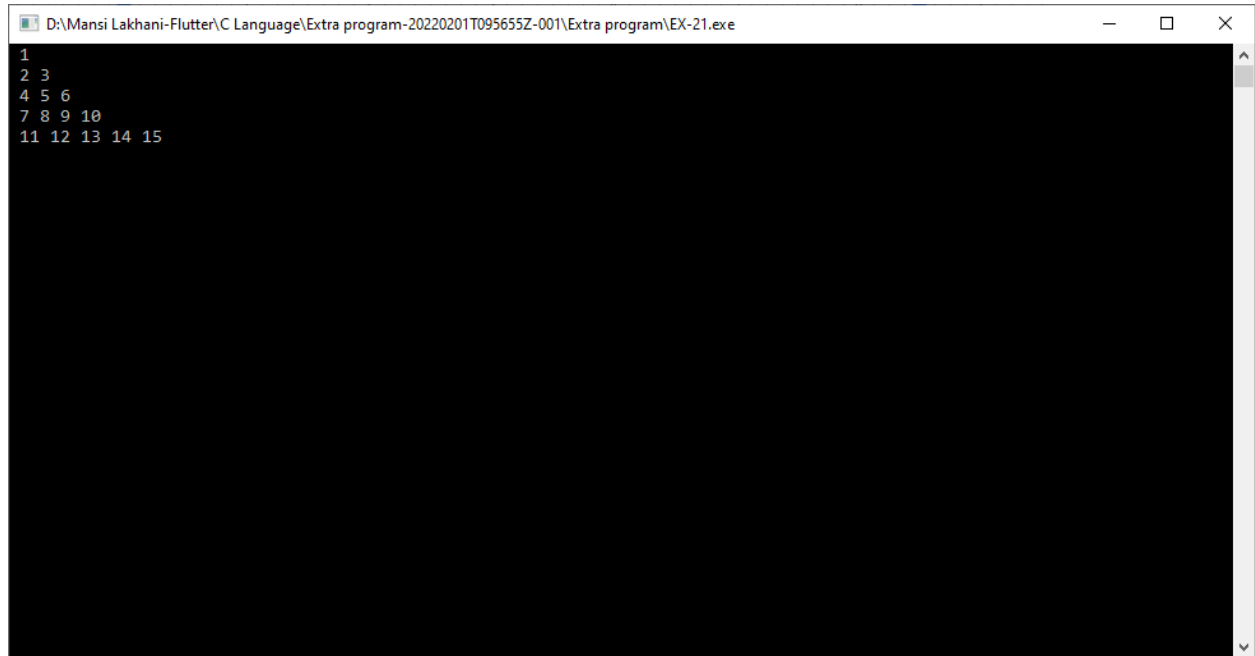
### **Aim:**

**1**  
**2 3**  
**4 5 6**  
**7 8 9 10**  
**11 12 13 14 15**

### **Program:**

```
#include<stdio.h>
#include<conio.h>
main()
{
    int i,j,k=1;
    clrscr();
    for(i=1;i<=5;i++)
    {
        for(j=1;j<=i;j++)
        {
            printf(" %d",k++);
        }
        printf("\n");
    }
    getch();
}
```

## Output:



A screenshot of a Windows command prompt window. The title bar at the top reads "D:\Mansi Lakhani-Flutter\C Language\Extra program-20220201T095655Z-001\Extra program\EX-21.exe". The window has standard minimize, maximize, and close buttons. The command prompt area is black with white text. The output consists of five lines of numbers: "1", "2 3", "4 5 6", "7 8 9 10", and "11 12 13 14 15". A vertical scrollbar is visible on the right side of the window.

```
1
2 3
4 5 6
7 8 9 10
11 12 13 14 15
```

## **Practical-22**

### **Aim:**

**A**

**BB**

**CCC**

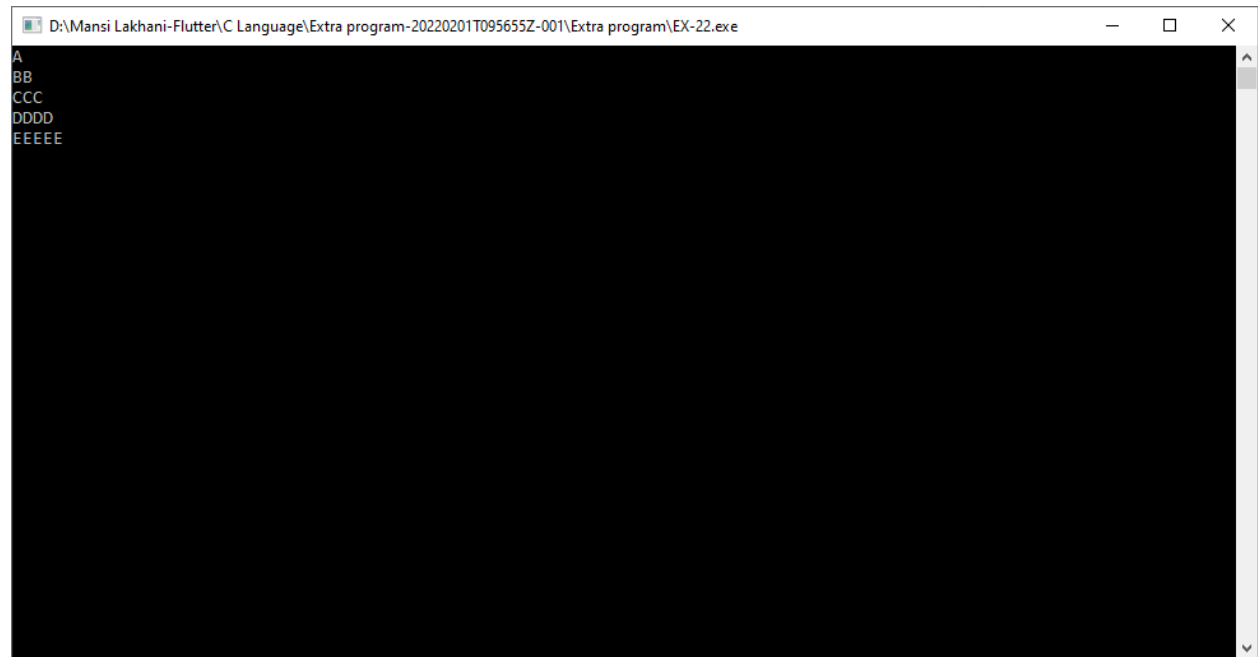
**DDDD**

**EEEE**

### **Program:**

```
#include<stdio.h>
#include<conio.h>
main()
{
    int i,j,k;
    clrscr();
    for(i=65;i<=69;i++)
    {
        for(j=65;j<=i;j++)
        {
            printf("%c",i);
        }
        printf("\n");
    }
    getch();
}
```

### **Output:**



## **Practical-23**

### **Aim:**

**1**

**10**

**101**

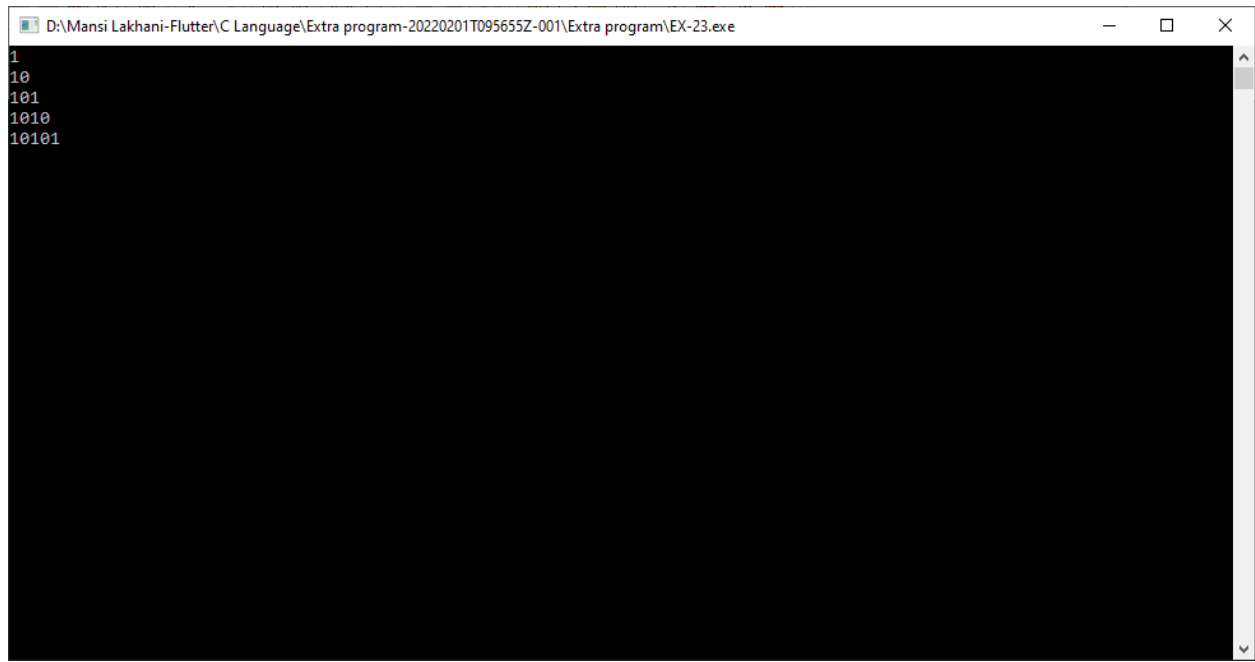
**1010**

**10101**

### **Program:**

```
#include<stdio.h>
#include<conio.h>
main()
{
    int i,j;
    clrscr();
    for(i=1;i<=5;i++)
    {
        for(j=1;j<=i;j++)
        {
            if(j%2==1)
            {
                printf("1");
            }
            else
            {
                printf("0");
            }
        }
        printf("\n");
    }
    getch();
}
```

## Output:



A screenshot of a Windows command prompt window. The title bar shows the file path: D:\Mansi Lakhani-Flutter\C Language\Extra program-20220201T095655Z-001\Extra program\EX-23.exe. The window has standard minimize, maximize, and close buttons. The command prompt area is black with white text. The output consists of five lines of binary strings: 1, 10, 101, 1010, and 10101. A vertical scrollbar is visible on the right side of the window.

```
D:\Mansi Lakhani-Flutter\C Language\Extra program-20220201T095655Z-001\Extra program\EX-23.exe
1
10
101
1010
10101
```



## **Practical-24**

### **Aim:**

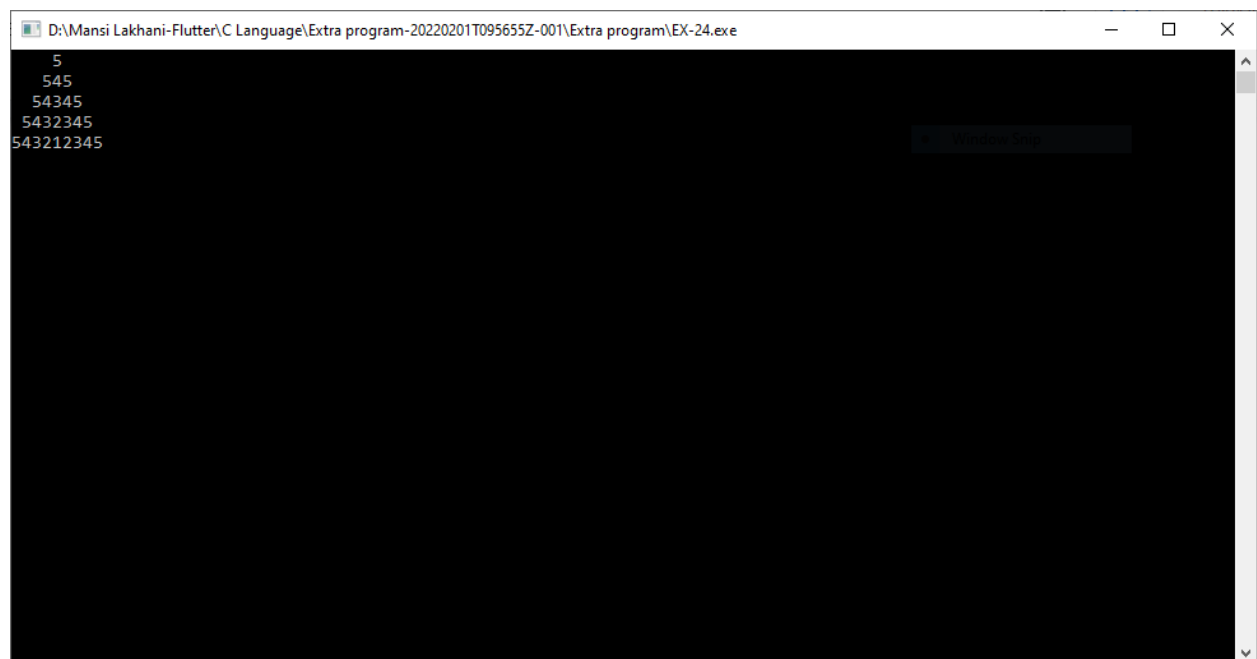
5  
545  
54345  
5432345  
543212345

### **Program:**

```
#include<stdio.h>
#include<conio.h>
main()
{
    int i,j,k;
    clrscr();
    for(i=5;i>=1;i--)
    {
        for(k=1;k<i;k++)
        {
            printf(" ");
        }
        for(j=5;j>=i;j--)
        {
            printf("%d",j);
        }
        for(j=i+1;j<=5;j++)
        {
            printf("%d",j);
        }
        printf("\n");
    }
}
```

```
}  
getch();  
}
```

## **Output:**



The screenshot shows a Windows command prompt window with the title bar "D:\Mansi Lakhani-Flutter\C Language\Extra program-20220201T095655Z-001\Extra program\EX-24.exe". The window contains the following output:

```
5  
545  
54345  
5432345  
543212345
```

A "Window Snip" button is visible on the right side of the window.

