

Example.1: Program to print the numeric pyramid:

```
#include <stdio.h>
#include <conio.h>
main()
{
    int r,c,s;
    clrscr();
    for(r=1;r<=5;r++)
    {
        for(s=5;s>r;s--)
            printf("%c",32);
        for(c=1;c<=r;c++)
            printf("%d",c);
        for(c=2;c>=1;c--)
            printf("%d",c);
        printf("\n");
    }
    getch();
}
```

Output

```
1
121
12321
1234321
123454321
```

Example.2: Program to print the following pattern:

```
#include <stdio.h>
#include <conio.h>
main()
{
    int r,c,s,x;
    clrscr();
    for(r=1;r<=9;r+=2)
    {
        for(s=9;s>r;s-=2)
            printf("%c",32);
        for(c=1;c<=r;c+=2)
            printf("%d",c);
        printf("\n");
    }
    for(r=7;r>=1;r-=2)
    {
        for(s=9;s>r;s-=2)
            printf("%c",32);
        for(c=1;c<=r;c+=2)
            printf("%d",c);
        printf("\n");
    }
    getch();
}
```

Output

```
1
13
135
1357
13579
1357
135
13
1
```

Example.3: Program to print the following pattern:

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int i,j,k=71,l=-1,s;
    clrscr();
    for(i=1;i<=7;i++)
    {
        for(j=65;j<=k;j++)
            printf("%c",j);
        if(i==1)
            j--;
        else
            for(s=1;s>=1;s--)
                printf(" ");
            for(j--;j>=65;j--)
                printf("%c",j);
            printf("\n");
            l=l+2;
            k--;
        }
    getch();
}
```

Output

```
ABCDEF GFEDCBA
ABCDEF  FEDCBA
ABCDE   EDCBA
ABCD    DCBA
ABC     CBA
AB      BA
A       A
```

Try yourself:

1. Rewrite the above examples with the help of while loop.
2. Write a program to print the character pyramid.
3. Write a program to print the following patterns:

```
123454321
 1234321
   12321
    121
     1
```

```
1
13
135
1357
13579
1357
135
13
1
```

```
A      A
AB     BA
ABC    CBA
ABCD   DCBA
ABCDE  EDCBA
ABCDEF FEDCBA
ABCDEFG FEDCBA
```