1. Print the following pattern

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

Taking the number of lines ‘n’ as input. Here n=5.

```
#include<stdio.h>
void main()
{
 int n,i,j;
 printf("\n Enter number of lines of pattern to print:");
 scanf("%d",&n);
 for(i=1;i<=n;i++)
 {
    for(j=1;j<=n;j++)
          printf("*");
     printf("\n");
  }
}
```

2. Print the following pattern

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

Taking the number of lines ‘n’ as input. Here n=5.

```
#include<stdio.h>
void main()
{
 int n,i,j;
 printf("\n Enter number of lines of pattern to print:");
 scanf("%d",&n);
 for(i=1;i<=n;i++)
 {
    for(j=1;j<=i;j++)
          printf("*");
     printf("\n");
  }
}
```

3. Print the following pattern

```
1
2  2
3  3  3
4  4  4  4
```

Taking the number of lines ‘n’ as input. Here n=4.

```
#include<stdio.h>
void main()
{
 int n,i,j;
 printf("\n Enter number of lines of pattern to print:");
 scanf("%d",&n);
 for(i=1;i<=n;i++)
 {
    for(j=1;j<=i;j++)
          printf("%d\t",i);
    printf("\n");
  }
}
```

4. Print the following pattern

```
4
3  3
2  2  2
1  1  1  1
```

Taking the number of lines ‘n’ as input. Here n=4.

```
#include<stdio.h>
void main()
{
 int n,i,j;
 printf("\n Enter number of lines of pattern to print:");
 scanf("%d",&n);
 for(i=1;i<=n;i++)
 {
    for(j=1;j<=i;j++)
          printf("%d\t",n-i+1);
    printf("\n");
  }
}
```

5. Print the following pattern

```
1
1   2
1   2   3
1   2   3   4
```

Taking the number of lines ‘n’ as input. Here n=4.

```
#include<stdio.h>
void main()
{
 int n,i,j;
 printf("\n Enter number of lines of pattern to print:");
 scanf("%d",&n);
 for(i=1;i<=n;i++)
 {
    for(j=1;j<=i;j++)
          printf("%d\t",j);
    printf("\n");
  }
}
```

6. Print the following pattern

```
4
4   3
4   3   2
4   3   2   1
```

Taking the number of lines ‘n’ as input. Here n=4.

```
#include<stdio.h>
void main()
{
 int n,i,j;
 printf("\n Enter number of lines of pattern to print:");
 scanf("%d",&n);
 for(i=1;i<=n;i++)
 {
    for(j=1;j<=i;j++)
          printf("%d\t",n-j+1);
    printf("\n");
  }
}
```

7. Print the following pattern (Flyod's triangle)

```
1
2  3
4  5  6
7  8  9  10
```

Taking the number of lines 'n' as input. Here n=4.

```
#include<stdio.h>
void main()
{
 int n,i,j,d=1;
 printf("\n Enter number of lines of pattern to print:");
 scanf("%d",&n);
 for(i=1;i<=n;i++)
 {
    for(j=1;j<=i;j++,d++)
          printf("%d\t",d);
    printf("\n");
  }
}
```

8. Print the following pattern

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

Taking the number of lines 'n' as input. Here n=4.

```
#include<stdio.h>
void main()
{
 int n,i,j;
 printf("\n Enter number of lines of pattern to print:");
 scanf("%d",&n);
 for(i=1;i<=n;i++)
 {
    for(j=1;j<=n-i+1;j++)
          printf("*");
     printf("\n");
  }
```

9. Print the following pattern

```
1   1   1   1
2   2   2
3   3
4
```

Taking the number of lines ‘n’ as input. Here n=4.

```
void main()
{
 int n,i,j;
 printf("\n Enter number of lines of pattern to print:");
 scanf("%d",&n);
 for(i=1;i<=n;i++)
 {
    for(j=1;j<=n-i+1;j++)
          printf("%d\t",i);
     printf("\n");
  }
}
```

10. Print the following pattern

```
4   4   4   4
3   3   3
2   2
1
```

Taking the number of lines ‘n’ as input. Here n=4.

```
#include<stdio.h>
void main()
{
 int n,i,j;
 printf("\n Enter number of lines of pattern to print:");
 scanf("%d",&n);
 for(i=1;i<=n;i++)
 {
    for(j=1;j<=n-i+1;j++)
          printf("%d\t",n-i+1);
     printf("\n");
  }
}
```

11. Print the following pattern

```
1  2  3  4
1  2  3
1  2
1
```

Taking the number of lines ‘n’ as input. Here n=4.

```
#include<stdio.h>
void main()
{
 int n,i,j;
 printf("\n Enter number of lines of pattern to print:");
 scanf("%d",&n);
 for(i=1;i<=n;i++)
 {
    for(j=1;j<=n-i+1;j++)
          printf("%d\t",j);
     printf("\n");
  }
}
```

12. Print the following pattern

```
4  3  2  1
4  3  2
4  3
4
```

Taking the number of lines ‘n’ as input. Here n=4.

```
#include<stdio.h>
void main()
{
 int n,i,j;
 printf("\n Enter number of lines of pattern to print:");
 scanf("%d",&n);
 for(i=1;i<=n;i++)
 {
    for(j=1;j<=n-i+1;j++)
          printf("%d\t",n-j+1);
     printf("\n");
  }
}
```

13. Print the following pattern

```
1   2   3   4
5   6   7
8   9
10
```

Taking the number of lines ‘n’ as input. Here n=4.

```
#include<stdio.h>
void main()
{
 int n,i,j,d=1;
 printf("\n Enter number of lines of pattern to print:");
 scanf("%d",&n);
 for(i=1;i<=n;i++)
 {
    for(j=1;j<=n-i+1;j++,d++)
          printf("%d\t",d);
     printf("\n");
  }
}
```

14. Print the following pattern

```
   * //3 spaces and 1 *
  ** //2 spaces and 2 *
 ***
****
```

Taking the number of lines ‘n’ as input. Here n=4.

```
#include<stdio.h>
void main()
{
 int n,i,j;
 printf("\n Enter number of lines of pattern to print:");
 scanf("%d",&n);
 for(i=1;i<=n;i++)
 {
    for(j=1;j<=n-i;j++)
          printf(" ");
     for(j=1;j<=i;j++)
          printf("*");
     printf("\n");
  }
}
```

Or

Reduce the number of for loops as mentioned in the following alternate solution.

```
void main()
{
 int n,i,j;
 printf("\n Enter number of lines of pattern to print:");
 scanf("%d",&n);
 for(i=1;i<=n;i++)
 {
    for(j=1;j<=n;j++)
    {
       if(j<=n-i)
         printf(" ");
       else
         printf("*");
    }
    printf("\n");
  }
}
```

15. Print the following pattern

```
          1
       2  2
    3  3  3
4  4  4  4
```

Taking the number of lines ‘n’ as input. Here n=4.

```
void main()
{
 int n,i,j;
 printf("\n Enter number of lines of pattern to print:");
 scanf("%d",&n);
 for(i=1;i<=n;i++)
 {
    for(j=1;j<=n;j++)
    {
       if(j<=n-i)
         printf("  \t");
       else
         printf("%2d\t",i);
    }
    printf("\n");
  }
}
```

16. Print the following pattern

```
          4
       3  3
    2  2  2
1   1  1  1
```

Taking the number of lines ‘n’ as input. Here n=4.

```
void main()
{
 int n,i,j;
 printf("\n Enter number of lines of pattern to print:");
 scanf("%d",&n);
 for(i=1;i<=n;i++)
 {
    for(j=1;j<=n;j++)
     {
        if(j<=n-i)
          printf("  \t");
        else
           printf("%2d\t",n-i+1);
     }
     printf("\n");
  }
}
```

17. Print the following pattern

```
          1
       1  2
    1  2  3
1   2  3  4
```

Taking the number of lines ‘n’ as input. Here n=4.

```
void main()

{

 int n,i,j;

 printf("\n Enter number of lines of pattern to print:");

 scanf("%d",&n);

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

 {

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

           printf("  \t");
```

```
    for(j=1;j<=i;j++)
        printf("%2d\t",j);
    printf("\n");
  }
}
```

18. Print the following pattern

```
                4
            3   4
        2   3   4
1   2   3   4
```

Taking the number of lines ‘n’ as input. Here n=4.

```
void main()
{
 int n,i,j;
 printf("\n Enter number of lines of pattern to print:");
 scanf("%d",&n);
 for(i=1;i<=n;i++)
 {
    for(j=1;j<=n;j++)
    {
        if(j<=n-i)
          printf("  \t");
        else
          printf("%2d\t",j);
    }
    printf("\n");
  }
}
```

19. Print the following pattern

```
                4
            4   3
        4   3   2
4   3   2   1
```

Taking the number of lines ‘n’ as input. Here n=4.

```
void main()
{
 int n,i,j;
```

```
 printf("\n Enter number of lines of pattern to print:");
 scanf("%d",&n);
 for(i=1;i<=n;i++)
 {
    for(j=1;j<=n-i;j++)
          printf("  \t");
     for(j=1;j<=i;j++)
          printf("%2d\t",n-j+1);
     printf("\n");
 }
}
```

20. Print the following pattern

```
          1
       2  1
    3  2  1
4   3  2  1
```

Taking the number of lines ‘n’ as input. Here n=4.

```
void main()
{
 int n,i,j;
 printf("\n Enter number of lines of pattern to print:");
 scanf("%d",&n);
 for(i=1;i<=n;i++)
 {
    for(j=1;j<=n;j++)
     {
        if(j<=n-i)
          printf("  \t");
        else
          printf("%2d\t",n-j+1);
```

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

21. Print the following pattern

```
            1
        2   3
    4   5   6
7   8   9   10
```

Taking the number of lines ‘n’ as input. Here n=4.

```
void main()
{
 int n,i,j,d=1;
 printf("\n Enter number of lines of pattern to print:");
 scanf("%d",&n);
 for(i=1;i<=n;i++)
 {
    for(j=1;j<=n-i;j++)
            printf("  \t");
     for(j=1;j<=i;j++,d++)
            printf("%2d\t",d);
     printf("\n");
  }
}
```

22. Print the following pattern

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

Taking the number of lines ‘n’ as input. Here n=4.

```
void main()
{
 int n,i,j;
 printf("\n Enter number of lines of pattern to print:");
 scanf("%d",&n);
 for(i=1;i<=n;i++)
 {
    for(j=1;j<=i-1;j++)
         printf(" ");
    for(j=1;j<=n-i+1;j++)
         printf("*");
    printf("\n");
  }
}
```

Or

Reduce the number of for loops as mentioned in the following alternate solution.

```
void main()
{
 int n,i,j;
 printf("\n Enter number of lines of pattern to print:");
 scanf("%d",&n);
 for(i=1;i<=n;i++)
 {
    for(j=1;j<=n;j++)
    {
        if(j<=i-1)
            printf(" ");
        else
          printf("*");
    }
    printf("\n");
  }
}
```

23. Printing the following pattern

```
1  1  1  1
  2  2  2
     3  3
        4
```

Take input as n which denotes the no. of lines to be printed.

```
void main()
{
 int n,i,j;
 printf("\n Enter number of lines of pattern to print:");
 scanf("%d",&n);
 for(i=1;i<=n;i++)
 {
    for(j=1;j<=n;j++)
    {
        if(j<=i-1)
           printf("  \t");
       else
          printf("%2d\t",i);
    }
    printf("\n");
  }
}
```

24. Printing the following pattern

```
4  4  4  4
   3  3  3
      2  2
         1
```

Take input as n which denotes the no. of lines to be printed

```
void main()
{
 int n,i,j;
 printf("\n Enter number of lines of pattern to print:");
 scanf("%d",&n);
 for(i=1;i<=n;i++)
 {

    for(j=1;j<=n;j++)
    {
        if(j<=i-1)
           printf("  \t");
        else
          printf("%2d\t",n-i+1);
    }
    printf("\n");
  }
}
```

25. Printing the following pattern

```
1  2  3  4
   1  2  3
      1  2
         1
```

Take input as n which denotes the no. of lines to be printed

```
void main()
{
 int n,i,j;
 printf("\n Enter number of lines of pattern to print:");
 scanf("%d",&n);
 for(i=1;i<=n;i++)
 {
    for(j=1;j<=i-1;j++)
          printf("  \t");
     for(j=1;j<=n-i+1;j++)
          printf("%2d\t",j);
     printf("\n");
  }
}
```

26. Printing the following pattern

```
1  2  3  4
   2  3  4
      3  4
         4
```

Take input as n which denotes the no. of lines to be printed

```
void main()
{
 int n,i,j;
 printf("\n Enter number of lines of pattern to print:");
 scanf("%d",&n);
 for(i=1;i<=n;i++)
 {

     for(j=1;j<=n;j++)
     {
         if(j<=i-1)
             printf("  \t");
         else
           printf("%2d\t",j);
     }
     printf("\n");
  }
}
```

27. Printing the following pattern

```
4  3  2  1
   4  3  2
      4  3
         4
```

Take input as n which denotes the no. of lines to be printed

```
void main()
{
 int n,i,j;
 printf("\n Enter number of lines of pattern to print:");
 scanf("%d",&n);
 for(i=1;i<=n;i++)
 {
    for(j=1;j<=i-1;j++)
          printf("  \t");
     for(j=1;j<=n-i+1;j++)
               printf("%2d\t",n-j+1);
     printf("\n");
  }
}
```

28. Printing the following pattern

```
4  3  2  1
   3  2  1
      2  1
         1
```

Take input as n which denotes the no. of lines to be printed

```
void main()
{
 int n,i,j;
 printf("\n Enter number of lines of pattern to print:");
 scanf("%d",&n);
 for(i=1;i<=n;i++)
 {

     for(j=1;j<=n;j++)
     {
         if(j<=i-1)
             printf("  \t");
         else
           printf("%2d\t",n-j+1);
     }
     printf("\n");
  }
}
```