Assignment = 8

1. write a program to print the pattern like

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

```c
#include <stdio.h>
int main()
{
    int i,j;
    for(i=1;i<=5;i++)
    {
        for(j=1;j<=i;j++)
        {
            printf("*");
        }
        printf("\n");
    }
}
```

2. write a program to print the pattern like

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

```c
#include <stdio.h>
int main()
{
    int i,j;
    for(i=1;i<=5;i++)
    {
        for(j=1;j<=5;j++)
        {
            if(j>=6-i)
            printf("*");
            else
            printf(" ");
        }
```

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

3. write a program to print the pattern like

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

```c
 #include <stdio.h>
int main()
{
        int i,j;
        for(i=1;i<=5;i++)
        {
                for(j=1;j<=5;j++)
                {
                        if(j<=6-i)
                        printf("*");
                        else
                        printf(" ");
                }
                printf("\n");
        }
}
```

4. write a program to print the pattern like

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

```c
 #include <stdio.h>
int main()
{
        int i,j;
        for(i=1;i<=5;i++)
        {
                for(j=1;j<=5;j++)
                {
                        if(j>=i)
                        printf("*");
                        else
```

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

5. write a program to print the pattern like

```
            *
          * * *
        * * * * *
      * * * * * * *
    * * * * * * * * *      */
```

```c
#include <stdio.h>
int main()
{
    int i,j;
    for(i=1;i<=5;i++)
    {
        printf("\t");
        for(j=1;j<=2*5-1;j++)
        {
            if(j>=6-i && j<=4+i)
            printf("*");
            else
            printf(" ");
        }
        printf("\n ");
    }
}
```

6. write a program to print the pattern like

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

```c
#include <stdio.h>
int main()
{
    int i,j;
    for(i=1;i<=5;i++)
    {
        printf("\t");
        for(j=1;j<=9;j++)
        {
            if(j>=i && j<=10-i)
            printf("*");
```

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

7. **write a program to print the pattern like**

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

```c
#include <stdio.h>
int main()
{
        int i,j;
        for(i=1;i<=5;i++)
        {
                printf("\t");
                for(j=1;j<=2*5;j++)
                {
                        if(j<=6-i || j>=5+i)
                        printf("*");
                        else
                        printf(" ");
                }
                printf("\n ");
        }
}
```

8. **write a program to print the pattern like**

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

```c
 #include <stdio.h>
int main()
{
        int i,j,k;
        for(i=1;i<=4;i++)
        {
    k=0;
    printf("\t");
                for(j=1;j<=7;j++)
                {
                        if(j>=5-i && j<=3+i)
                        {
```

```
                    if(j<=8-j)
                printf("%d",++k);
                else
                printf("%d",--k);
            }
                else
                printf(" ");
        }
            printf("\n ");
        }
}
```

9. write a program to print the pattern like

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

```c
#include <stdio.h>
int main()
{
    int i,j,k;
    for(i=1;i<=4;i++)
    {
k=0;
printf("\t");
            for(j=1;j<=2*4-1;j++)
            {
                if(j>=i && j<=8-i)
                {
                    if(j<=8-j)
                printf("%d",++k);
                else
                printf("%d",--k);
            }
                else
                printf(" ");
        }
            printf("\n ");
        }
}
```

10. write a program to print the pattern like

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

```c
#include <stdio.h>
int main()
```

```c
{
    int i,j,k;
    for(i=1;i<=4;i++)
    {
        k=0;
        printf("\t");
        for(j=1;j<=7;j++)
        {
            if(j<=5-i || j>=3+i)
            {
                if(j<=5-i && j<=3+i)
                printf("%d",++k);
                else if(j==3+i)
                printf("%d",k);
                else
                printf("%d",--k);
            }
            else
            printf(" ");
        }
        printf("\n ");
    }
}
```

11. write a program to print the pattern like

```
        A
      A B A
    A B C B A
  A B C D C B A
A B C D E D C B A
```

```c
#include <stdio.h>
int main()
{
    int i,j,k;
    for(i=1;i<=5;i++)
    {
        k=64;
        printf("\t");
        for(j=1;j<=9;j++)
        {
            if(j>=6-i && j<=4+i)
            {
                if(j>=6-i && j<=10-j)
                printf("%c",++k);
                else
```

```
                printf("%c",--k);
            }
                else
                printf(" ");
        }
            printf("\n ");
    }
}
```

12. write a program to print the pattern like

```
A B C D C B A
 A B C B A
  A B A
   A
```

```c
#include <stdio.h>
int main()
{
    int i,j,k;
    for(i=1;i<=4;i++)
    {
    k=64;
    printf("\t");
            for(j=1;j<=7;j++)
            {
                if(j>=i && j<=8-i)
                {
                        if(j>=i && j<=8-j)
                printf("%c",++k);
                else
                printf("%c",--k);
                }
                else
                printf(" ");
            }
            printf("\n ");
    }
}
```

13. write a program to print the pattern like

```
A B C D E F G F E D C B A
A B C D E F   F E D C B A
A B C D E       E D C B A
A B C D           D C B A
A B C               C B A
A B                   B A
A                       A
```

```c
#include <stdio.h>
int main()
{
    int i,j,k;
    for(i=1;i<=7;i++)
    {
        k=64;
        printf("\t");
        for(j=1;j<=13;j++)
        {
            if(j<=8-i || j>=6+i)
            {
                if(j<=8-i && j<=6+i)
                printf("%c",++k);
                else if(j==6+i)
                printf("%c",k);
                else
                printf("%c",--k);
            }
            else
            printf(" ");
        }
        printf("\n ");
    }
}
```

14. write a program to print the pattern like

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

```c
#include <stdio.h>
int main()
{
    int i,j,k;
    for(i=1;i<=5;i++)
    {
        printf("\t");
        for(j=1;j<=5;j++)
        {
            if(j==1 || j==i ||i==5)
            printf("*");
            else
            printf(" ");
        }
```

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

15. write a program to print the pattern like

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

```c
#include <stdio.h>
int main()
{
      int i,j,k;
      for(i=1;i<=5;i++)
      {
              printf("\t");
              for(j=1;j<=5;j++)
              {
      if(j==5 ||j==6-i ||i==5)
      printf("*");
      else
      printf(" ");
              }
          printf("\n");
}
}
```

16. write a program to print the pattern like

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

```c
#include <stdio.h>
int main()
{
      int i,j,k;
      for(i=1;i<=5;i++)
      {
              printf("\t");
              for(j=1;j<=9;j++)
              {
      if(j==6-i ||j==4+i || i==2*5-i)
      printf("*");
      else
      printf(" ");
              }
          printf("\n");
```

}
}

17. write a program to print the pattern like

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

```c
#include <stdio.h>
int main()
{
      int i,j,k;
      for(i=1;i<=9;i++)
      {
            printf("\t");
            for(j=1;j<=9;j++)
            {
      if(j>=6-i && j<=4+i)
      {
       if(i>=i/2)
       {
            if(j>=i-4 && j<=14-i)
            printf("*");
            else
            printf(" ");
            }
                else
                printf("*");
            }
      else
      printf(" ");
          }
        printf("\n");
}
}
```

18. write a program to print the pattern like

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

```c
#include <stdio.h>
int main()
{
        int i,j,k;
        for(i=1;i<=3;i++)
        {
                printf("\t");
                for(j=1;j<=19;j++)
                {
                if ((j>=4-i && j<=6+i) ||  (j>=14-i  && j<=16+i))
                        printf("*");
                        else
                        printf(" ");
        }
        printf("\n");
        }
        for(i=1;i<=10;i++)
        {
                printf("\t");
                for(j=1;j<=19;j++)
                {
                        if((i==1) && (j==7)  )
                        {
                                printf("MySirG");
                }
                if(j>=i && j<=20-i)
                {
                   if((i==1) && (j>=7) && (j<=12))
                    continue;
                      printf("*");
                        }
                else
                        printf(" ");
                }
                printf("\n");
        }
}
```

19. write a program to print the pattern like

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

```c
for(i=1;i<=3;i++)
{
        printf("\t");
        for(j=1;j<=19;j++)
        {
        if ((j>=4-i && j<=6+i) ||  (j>=14-i  && j<=16+i))
                printf("*");
                else
                printf(" ");
    }
    printf("\n");
}
    for(i=1;i<=10;i++)
    {
        printf("\t");
        for(j=1;j<=19;j++)
        {
                if((i==1) && (j==7)  )
                {
                        printf("MYSirG");
                }
        if(j>=i && j<=20-i)
        {
          if((i==1) && (j>=7) && (j<=12))
           continue;
             printf("*");
                }
        else
                printf(" ");
                }
                printf("\n");
        }
        getch();
}
```