Example 1: Program to print half pyramid using *

```c
#include <stdio.h>
int main()
{   int i, j, rows;
    printf("Enter the number of rows: ");
    scanf("%d",&rows);
    for(i=1; i<=rows; ++i)
    {
        for(j=1; j<=i; ++j)
        {    printf("* ");
        }
        printf("\n");
    }
    return 0;
}
```

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

```
1
1 2
1 2 3
1 2 3 4
1 2 3 4 5
```

```c
#include <stdio.h>
int main()
{ int i, j, rows;
    printf("Enter the number of rows: ");
    scanf("%d",&rows);
     for(i=1; i<=rows; ++i)
    {
        for(j=1; j<=i; ++j)
        { printf("%d ",j);
        }
    printf("\n");
    }
return 0; }
```

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

```c
#include <stdio.h>
int main()
 {   int i, j;
     char input, alphabet = 'A';
     printf("Enter the uppercase character you want to
     print in last row: ");
     scanf("%c",&input);
     for(i=1; i <= (input-'A'+1); ++i)
{    for(j=1;j<=i;++j)
     { printf("%c", alphabet);
      }
     ++alphabet;
     printf("\n");
}
return 0; }
```

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

```c
#include <stdio.h>
int main()
 {
    int i, j, rows;
    printf("Enter the number of rows: ");
    scanf("%d",&rows);
     for(i=rows; i>=1; --i)
  {   for(j=1; j<=i; ++j)
    {  printf("* ");
    }
    printf("\n");
}
return 0;
 }
```

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

```c
#include <stdio.h>
int main()
{ int row, c, n;
    printf("Enter the number of rows in pyramid of stars
    you wish to see ");
    scanf("%d",&n);

    for ( row = 1 ; row <= n ; row++ )
    {
    for ( c = 1 ; c < = n-row ; c++ )
        printf(" ");
    for ( c = 1 ; c <= 2*row - 1 ; c++ )
        printf("*");

printf("\n");
}   return 0; }
```

```
        1                main()
       232               { int n, c, d, num = 1, space;
      34543              scanf("%d",&n);
     4567654              space = n - 1;
    567898765            for ( d = 1 ; d <= n ; d++ )
                         { num = d;
                         for ( c = 1 ; c <= space ; c++ )
                         printf(" ");
                         space--;
                           for ( c = 1 ; c <= d ; c++ )
                         { printf("%d", num);
                         num++; }
                         num--;
                         num--;
                         for ( c = 1 ; c < d ; c++)
                         { printf("%d", num);
                          num--; }
                         printf("\n");   }
                          return 0;
                          }
```

Home Assignments

2. Write a Program to display the following pattern

```
A

A        B

A        B        C

A        B        C        D

....................................

......................................

A        B .....................................                    X        Y        Z
```