

Pattern Builder

Q-1 Write a code to print the square symbolic pattern. Print the * symbol.

→ Code :-

```
for (i=0; i<5; i++)  
{  
    for (j=0; j<5; j++)  
    {  
        printf ("* ");  
    }  
    printf ("\n");  
}
```

→ output :-

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

Q-2 Write a code to print the Square Numeric pattern

→ code:-

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

→ output :-

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

Q-3 Write a code to print the Right half
Triangle Numeric pattern.

→ code :-

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

→ output :-

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

Q-4 Write a code to print the Right-half Triangle character pattern.

```
→ for (int i = "A"; i <= "E"; i++)  
{  
    for (int j = "A"; j <= i; j++)  
    {  
        printf("%c", j);  
    }  
    printf("\n");  
}
```

→ Output:-

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

Q-5 Write a code to print the Left-half Triangle Numeric pattern.

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

→ output :-

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

Q-6 Write a code to print the left-half Triangle symbolic Pattern Print the @ symbol.

→ Code:-

```
for (i=1; i<=5; i++)
{
    for (j=1; j<=5-i; j++)
    {
        printf(" ");
    }
    for (j=1; j<=i; j++)
    {
        printf("@");
    }
    printf("\n");
}
```

→ output :-

```
    @
   @@
  @@@
 @@@@
@@@@
```


Q-7 Write a code to print the inverted Right-half Triangle character pattern.

→ Code:-

```
for (i = 'E'; i >= 'A'; i--)  
{  
    for (j = 'A'; j <= i; j++)  
    {  
        printf ("%c", j);  
    }  
    printf ("\n");  
}
```

→ output:-

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

Q-8 Write a code to print the inverted Right-half Triangle Numeric pattern.

→ Code:-

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

→ output:-

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

Q-9 Write a code to print the Inverted Left-half Triangle Symbolic Pattern.
Print the * symbol.

→ Code:-

```
for (i=5; i>=1; i--)
{
    for (k=1; k<=5-i; k++)
    {
        printf(" ");
    }
    for (j=1; j<=i; j++)
    {
        printf("* ");
    }
    printf("\n");
}
```

→ output:-

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

Q-10 Write a code to print the Inverted Left-half Triangle Numeric pattern.

→ code.

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

→ output:-

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

Q-11 Write a code to print the Floyd's Triangle Numeric Pattern.

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

→ output:-

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

Q-12 Write a code to print the full pyramid Numeric pattern.

→ code:-

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

→

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


Q-13 Write a code to print the full pyramidal symbolic pattern.

→ Code:-

```
for (i=1; i<=5; i++)  
{  
    for (j=1; j<=5-i; j++)  
    {  
        printf(" ");  
    }  
    for (k=1; k<=i; k++)  
    {  
        printf("* ");  
    }  
    printf("\n");  
}
```

→ output

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