

Pattern 1

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

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

	0	1	2	3	4
0	1				
1	0	1			
2	1	0	1		
3	0	1	0	1	
4	1	0	1	0	1

$(0,0), (1,1), (2,2), (3,3), (4,4)$
 $(2,0), (3,1), (4,0), (4,2)$

$(1,0), (2,1), (3,0), (3,2)$
 $(4,1), (4,3)$

```
for(int i=0; i<5; i++){
    for(int j=0; j<=i; j++){
        if((i+j)%2)
            printf("0");
        else
            printf("1");
    }
    printf("\n");
}
```

$$5 \times 1 = 5$$

$$5 \times 2 = 10$$

$$5 \times 3 = 15$$

$$5 \times 4 = 20$$

$$5 \times 5 = 25$$

$$5 \times 6 = 30$$

$$5 \times 7 = 35$$

$$5 \times 8 = 40$$

$$5 \times 9 = 45$$

$$5 \times 10 = 50$$