22/07/2020   c- Daily Flash.

	1	2	3	4	5
1	1				
2	1	2			
3	2	3	4		
4	4	5	6	7	
5	7	8	9	10	11

```c
#include <stdio.h>
void main() {
    int P=1;
    int num = 1;
    while (P <= 5) {
        int j = 1;
        while (j <= P) {
            printf(" %d ", num);
            num ++;
            j++;
        }
        P++;
        num --;
        printf(" \n");
    }
}
```

DRY RUN

Variables			Conditions		Statements	incre/decre		
i	num	j	k=5	j<=i	pf("%d", num)	num++	j++	i++
								num
1 1	1	1	✓	✓				
2	2			X	1	2	2	
							2	1
2 1	1	1	✓	✓	1	2	2	
2	2			✓	2	3	3	
3	3			X			3	2
3 2	1	1	✓	✓	2	3	2	
3	2			✓	3	4	3	
4	3			✓	4	5	4	
5	4			X			4	4
4 4	1	1	✓	✓	4	5	2	
5	2			✓	5	6	3	
6	3			✓	6	7	4	
7	4			✓	7	8	5	
8	5			X			5	7
5 7	1	1	✓	✓	7	8	2	
8	2			✓	8	9	3	
9	3			✓	9	10	4	
10	4			✓	10	11	5	
11	5			✓	11	12	6	
12	6			X			6	11
6			X					

Scanned by CamScanner

i \ j	1	2	3	4	5
1	5	4	3	2	1
2	8	6	4	2	
3	9	6	3		
4	8	4			
5	5				

```c
#include <stdio.h>
void main() {
    int num = 5;
    int i = 1;
    while (i <= 5) {
        int j = 1;
        int val = num;
        while (j <= num) {
            printf("%d ", i * val);
            j++;
            val--;
        }
        i++;
        num--;
        printf("\n");
    }
}
```

Dry Run

	variables			conditions		statements		
num	i	j	val	R=5	j<=num	PF(P*val)	j++ val--	Pif num--
5	1	1	5	✓	✓			
		2	4		✓	5	2	4
		3	3		✓	4	3	3
		4	2		✓	3	4	2
		5	1		✓	2	5	1
		6	0		✓	1	6	0
					X		2	4
4	2	1	4	✓	✓	8	2	3
		2	3		✓	6	3	2
		3	2		✓	4	4	1
		4	1		✓	2	5	0
		5	0		X		3	3
8	3	1	3	✓	✓	9	2	2
		2	2		✓	6	3	1
		3	1		✓	3	4	0
		4	0		X		4	2
4		1	2	✓	✓	8	2	1
		2	1		✓	4	3	0
		3	0		X		5	1
5		1	1	✓	✓	5	2	0
		2	0		X		6	0
0	6				X			

Q.

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

```c
#include<stdio.h>
void main() {
        int P=1;
        int k=1;
        while (P<=4) {
                int j =1;
                while (j<=7) {
                    if (P+j<=4 || P+j==6 || j-P>=4 ||
                            j-P==2 || P+j==5) {
                        print("   ");
                    } else {
                        printf("%d", k);
                    }
                    j++;
                }
                P++;
                printf("\n");
        }
}
```

Dry Run

P	K	j	Conditions P<=4 J<=7		PF( )	Statements PF(" ")	PF(x)	j++	Incre/decre P++
1	1	1	✓						
		2	✓		✓			2	K+1
		3	✓		✓	✓		3	
		4	✓		✓	✓		4	
2		5	✓		✗	✗	1	5	2
		6	✓		✓	✓		6	
		7	✓		✓	✓		7	
		8	✗		✓	✓		8	
									2
2	2	1	✓	✓					
		2	✓		✓	✓		2	
		3	✓		✓	✓		3	
3		4	✓		✗		2	4	3
		5	✓		✓	✓		5	
		6	✓		✗		3	6	4
4		7	✓		✓	✓	4	7	
		8	✗		✓	✓		8	
4	7	1	✓	✓	✗		7	2	8
8		2	✓		✓	✓		3	
		3	✓		✗		8	4	9
9		4	✓		✓	✓		5	
		5	✓		✗		9	6	10
10		6	✓		✓	✓		7	
		7	✓		✗		10	8	11
11		8	✗						5
			P< ✗						