12. (b) Test 12

Test Summary
- No. of Sections: 2
- No. of Questions: 3
- Total Duration: 45 min

Section 1 - Coding Proficiency

Section Summary
- No. of Questions: 2
- Duration: 30 min

Additional Instructions:

None

Q1.   **Pattern**
Write a 'C' program to print the pattern.
For n=5
1
3*2
4*5*6
10*9*8*7
11*12*13*14*15

Input Format

Input represent the value n

Output Format

Print the pattern

Constraints

1 <= n <= 100

Sample Input	Sample Output
4	1 3*2 4*5*6 10*9*8*7

Sample Input	Sample Output
46	1 3*2 4*5*6

Time Limit: - ms Memory Limit: - kb Code Size: - kb

Q2.   **Pattern**
Pattern Question:- For n=5
1
2 2
3 3 3
4 4 4 4
5 5 5 5 5
4 4 4 4
3 3 3
2 2
1

Input Format

Input contains n

Output Format

Print the pattern

Constraints

1 <= n <= 50

Sample Input	Sample Output
4	1 2 2 3 3 3 4 4 4 4

Time Limit: - ms Memory Limit: - kb Code Size: - kb

Section 2 - Essay Writing

Section Summary

- No. of Questions: 1
- Duration: 15 min

Additional Instructions:

None

Q1.   **Essay Writing**

A person you know is planning to move to your town or city. what do u think this person would like and dislike about living in your town or city? why? Use specific reasons and details

Directions

Write an essay for the given topic with specific reasons and details

Keywords

Section 1 - Coding Proficiency

Q1

Test Case

Input

Output

Input	Output
10	1 3*2 4*5*6 10*9*8*7

Weightage - 10

Input

Output

Input	Output
15	1 3*2 4*5*6

Weightage - 10

Input

Output

Input	Output
6	1 3*2 4*5*6 10*9*8*7

Weightage - 10

Input

Output

Input	Output
20	1 3*2 4*5*6

Weightage - 10

Input

Output

Input	Output
23	1 3*2 4*5*6

Weightage - 10

Input

Output

Input	Output
25	1 3*2 4*5*6

Weightage - 10

Input

Output

Input	Output
50	1 3*2 4*5*6

Weightage - 10

Input

```
5
```

Output

```
1
3*2
4*5*6
10*9*8*7
```

Weightage - 10

Input

```
7
```

Output

```
1
3*2
4*5*6
10*9*8*7
```

Weightage - 10

Input

```
33
```

Output

```
1
3*2
4*5*6
```

Weightage - 10

Sample Input

```
4
```

Sample Output

```
1
3*2
4*5*6
10*9*8*7
```

Sample Input

```
46
```

Sample Output

```
1
3*2
4*5*6
```

Solution

```c
#include<stdio.h>
int main()
{
    int col,row,start,n;
    scanf("%d",&n);
    for(row = 1 ; row<=n ; row++,printf("\n"))
    {
        if(row % 2 == 1)
        {
            start=((row*(row-1))/2)+1;
            for(col=1 ; col<=row ; col++)
                if( col == row)
                    printf("%d",start++);
                else
                    printf("%d*",start++);
        }
        else
        {
            start=(row*(row+1))/2;
            for(col=1 ; col<=row ; col++)
```

```c
#include<stdio.h>
int main()
{
    int col,row,start,n;
    scanf("%d",&n);
    for(row = 1 ; row<=n ; row++,printf("\n"))
    {
        if(row % 2 == 1)
        {
            start=((row*(row-1))/2)+1;
            for(col=1 ; col<=row ; col++)
                if( col == row)
                    printf("%d",start++);
                else
                    printf("%d*",start++);
        }
        else
        {
            start=(row*(row+1))/2;
            for(col=1 ; col<=row ; col++)
```

```
                    if( col == row)                              if( col == row)
                      printf("%d",start--);                        printf("%d",start--);
                    else                                         else
                      printf("%d*",start--);                       printf("%d*",start--);
                }                                            }
              // printf("\b ");                           // printf("\b ");
        }//outer                                    }//outer

        return 0;                                    return 0;
    }                                            }
```

Q2

Test Case

Input	Output
6	1
	2 2
	3 3 3
	4 4 4 4

Weightage - 5

Input	Output
10	1
	2 2
	3 3 3
	4 4 4 4

Weightage - 5

Input	Output
15	1
	2 2
	3 3 3
	4 4 4 4

Weightage - 10

Input	Output
20	1
	2 2
	3 3 3

Weightage - 10

Input	Output
27	1
	2 2
	3 3 3

Weightage - 10

Input	Output
32	1
	2 2
	3 3 3

Weightage - 10

Input	Output
38	1 2 2 3 3 3

Weightage - 10

Input	Output
44	1 2 2 3 3 3

Weightage - 10

Input	Output
50	1 2 2 3 3 3

Weightage - 10

Input	Output
53	1 2 2 3 3 3

Weightage - 10

Input	Output
13	1 2 2 3 3 3 4 4 4 4

Weightage - 10

Sample Input	Sample Output
4	1 2 2 3 3 3 4 4 4 4

Solution

```c
#include<stdio.h>
int main()
{
    int inp,col,row;
    scanf("%d",&inp);
    for(row = 1; row <= inp ; row++,printf("\n"))
    {
        for(col = 1;  col<=row ; col++)
        printf("%d ",row);
```

```c
        }
        for(row = inp-1; row >= 1 ; row--,printf("\n"))
        {
            for(col = 1;  col<=row ; col++)
            printf("%d ",row);
        }
        return 0;
    }




    #include<stdio.h>
    int main()
    {
        int inp,col,row;
        scanf("%d",&inp);
        for(row = 1; row <= inp ; row++,printf("\n"))
        {
            for(col = 1;  col<=row ; col++)
            printf("%d ",row);
        }
        for(row = inp-1; row >= 1 ; row--,printf("\n"))
        {
            for(col = 1;  col<=row ; col++)
            printf("%d ",row);
        }
        return 0;
    }
```

Section 2 - Essay Writing

Q1

Sample Essay

No Essay

Keywords

city, town, like, dislike, reason, living,