15. (b) Test 15

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**
Print the pattern
If N=4
1
2*3
3*4*5
4*5*6*7
3*4*5
2*3
1

Input Format

Input contains n

Output Format

Print the pattern

Constraints

1<=n<=50

Sample Input

```
5
```

Sample Output

```
1
2*3
3*4*5
4*5*6*7
```

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

Q2. **Pattern**
Print the pattern . n = 4
1
2 2
3 3 3
4 4 4 4

Input Format

Input is n

Output Format

Print the pattern

Constraints

1<= n <= 50

Sample Input

```
4
```

Sample Output

```
1
2  2
```

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

Section 2 - Essay Writing z

Section Summary

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

Additional Instructions:

None

Q1. **Essay Writing**

"Steps taken to preserve natural resources"

Directions

Write an essay for the given question

Keywords

Answer Key & Solution

Section 1 - Coding Proficiency

Q1

Test Case

Input

```
4
```

Output

```
1
2*3
3*4*5
4*5*6*7
```

Weightage - 5

Input

```
6
```

Output

```
1
2*3
3*4*5
4*5*6*7
```

Weightage - 10

Input

```
2
```

Output

```
1
2*3
1
```

Weightage - 5

Input

```
8
```

Output

```
1
2*3
3*4*5
4*5*6*7
```

Weightage - 10

Input

```
10
```

Output

```
1
2*3
3*4*5
4*5*6*7
```

Weightage - 10

Input

```
12
```

Output

```
1
2*3
3*4*5
4*5*6*7
```

Weightage - 10

Input

```
15
```

Output

```
1
2*3
3*4*5
4*5*6*7
```

Weightage - 10

Input

```
18
```

Output

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

Weightage - 10

Input

```
14
```

Output

```
1
2*3
3*4*5
4*5*6*7
```

Weightage - 10

Input

```
21
```

Output

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

Weightage - 10

Input

```
25
```

Output

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

Weightage - 10

Sample Input

```
5
```

Sample Output

```
1
2*3
3*4*5
4*5*6*7
```

Solution

```
#include<stdio.h>
//#include<conio.h>
int main()
{
  int n , ctr , ctr1,count;
 // clrscr();
  scanf("%d",&n);
  for( ctr = 1 ; ctr <= n ;printf("\n"), ctr++ )
    for( ctr1 = ctr,count = 0 ; count < ctr ; ctr1++,count++ )
       if( count == ctr-1)
     printf("%d",ctr1);
       else

       printf("%d*",ctr1);
  for( ctr = n-1 ; ctr > 0 ; printf("\n"),ctr--)
    for( ctr1 = ctr , count = 0 ; count < ctr ; ctr1++, count++)
       if( count == ctr-1)
     printf("%d",ctr1);
```

```
      else
      printf("%d*" , ctr1);

}



#include<stdio.h>
//#include<conio.h>
int main()
{
  int n , ctr , ctr1,count;
 // clrscr();
  scanf("%d",&n);
  for( ctr = 1 ; ctr <= n ;printf("\n"), ctr++ )
    for( ctr1 = ctr,count = 0 ; count < ctr ; ctr1++,count++ )
       if( count == ctr-1)
     printf("%d",ctr1);
       else

       printf("%d*",ctr1);
  for( ctr = n-1 ; ctr > 0 ; printf("\n"),ctr--)
    for( ctr1 = ctr , count = 0 ; count < ctr ; ctr1++, count++)
       if( count == ctr-1)
     printf("%d",ctr1);
       else
       printf("%d*" , ctr1);

  }
```

Q2

Test Case

Input	Output
5	1 2 2 3 3 3 4 4 4 4

Weightage - 5

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

Weightage - 5

Input	Output
8	1 2 2 3 3 3 4 4 4 4

Weightage - 10

Input	Output
11	1 2 2 3 3 3

3 3 3

Weightage - 10

Input

```
13
```

Output

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

Weightage - 10

Input

```
15
```

Output

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

Weightage - 10

Input

```
17
```

Output

```
1
2 2
3 3 3
```

Weightage - 10

Input

```
25
```

Output

```
1
2 2
3 3 3
```

Weightage - 10

Input

```
30
```

Output

```
1
2 2
3 3 3
```

Weightage - 10

Input

```
40
```

Output

```
1
2 2
3 3 3
```

Weightage - 10

Input

```
35
```

Output

```
1
2 2
3 3 3
```

Weightage - 10

Sample Input

```
4
```

Sample Output

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

Solution

```
#include<stdio.h>
//#include<conio.h>

int main()
{
   int n , ctr, ctr1;
  // clrscr();
   scanf("%d",&n);
   for( ctr = 1 ; ctr <= n ; printf("\n"),ctr++)
   {
       for( ctr1 = 1 ; ctr1 < ctr ; ctr1++ )
           printf("%d ",ctr);
       printf("%d",ctr);
   }
 }
```

```
#include<stdio.h>
//#include<conio.h>

int main()
{
   int n , ctr, ctr1;
  // clrscr();
   scanf("%d",&n);
   for( ctr = 1 ; ctr <= n ; printf("\n"),ctr++)
     for( ctr1 = 1 ; ctr1 <= ctr ; ctr1++ )
     printf("%d ",ctr);
}
```

Section 2 - Essay Writing z

Q1 Sample Essay

No Essay

Keywords

nature, resource, preserve, avoid, steps,