Exercise 2: Print the following pattern

Write a program to print the following number pattern using a loop.

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

Refer:

- Print Patterns In Python
- Nested loops in Python

Exercise 5: Display numbers from a list using loop

Write a program to display only those numbers from a list that satisfy the following conditions

- The number must be divisible by five
- If the number is greater than 150, then skip it and move to the next number
- If the number is greater than 500, then stop the loop

Given:

```
numbers = [12, 75, 150, 180, 145, 525, 50]
```

Expected output:

```
75
150
145
```

Exercise 11: Write a program to display all prime numbers within a range

Note: A Prime Number is a number that cannot be made by multiplying other whole numbers. A prime number is a natural number greater than 1 that is not a product of two smaller natural numbers

Examples:

- 6 is not a prime mumber because it can be made by 2×3 = 6
- 37 is a prime number because no other whole numbers multiply together to make it.

Given:

```
# range
start = 25
end = 50
```

Expected output:

```
Prime numbers between 25 and 50 are:
29
31
37
41
43
47
```

Exercise 17: Find the sum of the series upto n terms

Write a program to calculate the sum of series up to n term. For example, if `n =5` the series will become 2 + 22 + 222 + 2222 + 22222 = 24690

Given:

```
# number of terms
n = 5
```

Expected output:

```
24690
```

Exercise 18: Print the following pattern

Write a program to print the following start pattern using the `for` loop

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