



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
```

Calculate the sum of all numbers from 1 to a given number
Write a program to accept a number from a user and
calculate the sum of all numbers from 1 to a given number

For example, if the user entered 10 the output should be 55
(1+2+3+4+5+6+7+8+9+10)

Expected Output:

Enter number 10
Sum is: 55

Write a program to print multiplication table of a given number

For example, num = 2 so the output should be

2
4
6
8
10
12
14
16
18
20

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

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 number because it can be made by $2 \times 3 = 6$

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

Display Fibonacci series up to 10 terms

The Fibonacci Sequence is a series of numbers. The next number is found by adding up the two numbers before it. The first two numbers are 0 and 1.

For example, 0, 1, 1, 2, 3, 5, 8, 13, 21. The next number in this series above is $13+21 = 34$.

Expected output:

Fibonacci sequence:

0 1 1 2 3 5 8 13 21 34

Print the following pattern

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

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