# Loops

Exercises




# mycumprod

- Write a function mycumprod(v) that returns the cumulative product of the vector v, similar to matlab's cumprod() function.

```
>> mycumprod( [ 13 7 5 6 7 9 ] )
>> mycumprod([2 2 5 10 20])
ans =
   2   4  20 200 4000
```




# printparallel

- Write a function printparallel.m that takes inputs R,C and prints a parallelogram with height R and width C, as shown below.

```
>> printparallel( 4, 5 )
    *****
   *****
  *****
 *****
```




# pythagorean

- Write a function pythagorean(A) that finds all of the positive integer numbers $x, y, z \leq A$ that satisfy $x^2 + y^2 = z^2$. Your function will print these numbers as formatted in the sample output below, and also return a matrix with 3 columns, each row containing the integers x,y, and z.

```
>> pythogorian(20)
3*3 + 4*4 = 5*5
6*6 + 8*8 = 10*10
5*5 + 12*12 = 13*13
9*9 + 12*12 = 15*15
8*8 + 15*15 = 17*17
12*12 + 16*16 = 20*20

ans =
     3   4   5
     6   8  10
     5  12  13
     9  12  15
     8  15  17
    12  16  20
```