Program-1 part II

mat 1
iterate col then row
start place $ increment
1 $ 1

```
build_matrix (rows, col, start, incr)
declare → for i in rows
matrix=[]     matrix.append (new row)
total = start for j in col
                  matrix[i].append (total)
              total += incr
          return matrix
```

```
build string for printing
print matrix (matrix)
    ret string = ""
    for i in range matrix length
        for j in range matrix[0].length
            ret string.append (matrix[i][j],
                               tabspace, new line)
    return ret string
```

```
write_file (file name writing-pref, string)
                open file
                write string in file under writing
                                              pref
```

Matrix

3	12	21	30
6	15	24	33
9	18	27	36

3 (3×1 3×4 3×7 3×10 / 3×2 3×5 3×8 3×11 / 3×3 3×6 3×9 3×12)

3 3 3

add start?

(index 0,0)

5	35	65
10	40	70
15	45	75
20	50	80
25	55	85
30	60	90

len 6

= 5(1 7 13 / 2 8 14 / 3 9 15 / 4 10 16 / 5 11 17 / 6 12 18)

+6 +6

increment is 5

5(rows) = 5×3

5(rows · y) + how ever many we've iterated over

Columns index rows index

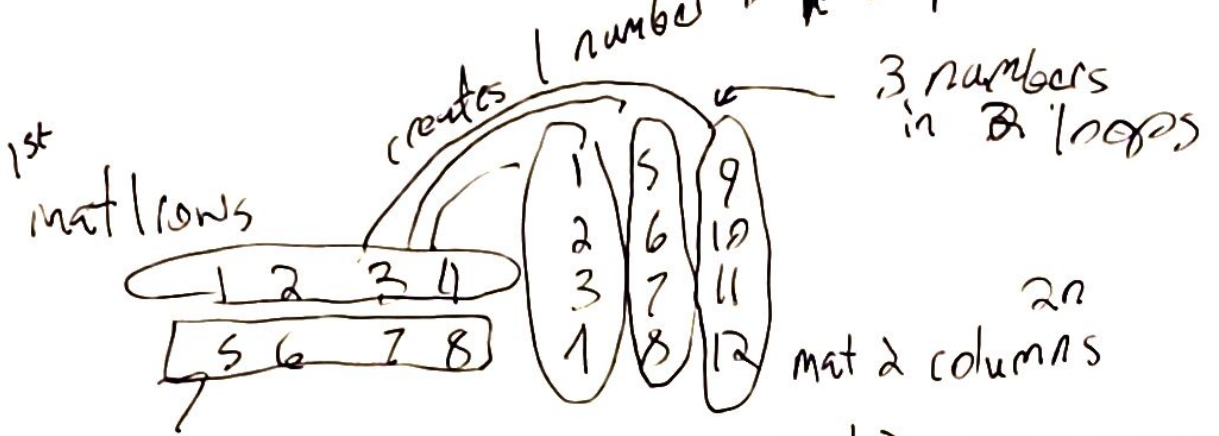
$$x = inc((rows \cdot y) + x) + start$$

needed or get ☺

P2

```
Parse from file (file)
    matrix = [ ]
    Open file
    for i in file length
        matrix.append(file line.split)
     — switch to digit here? later? —

    close file return matrix


compare size(mat1 mat2)
  if  mat size 1 == mat size 2
        return true
  return false

add matrix(mat1, mat2)
    mat final = [ ]
    for  i in range length mat1
        mat final.append(new row)
        for  i in range len mat1[0]
              mat final[i].append(digit + digit)

    return final map
```

Mat 3 similar to mat 2 need to multiply



full matrix
3 loops

mat 2 rows for multiplying
3rd # to iterate

```
for k in mat1 rows
    for j in (mat 2 col)
        for i in(mat1 rows)
            running total += multiply dig
    reset running total = 0
    return matrix.append(total)

return return matrix
```