

CIS 470 – iOS Programming

HW 03 – Fourth Grade Math

(with ranges)



Repeat HW#1 using ranges in your for loops. The assignment is reprinted below:

You are asked to help a 4th grader learn his times table up to 12. To do this, you decide that a compact multiplication table like the one shown below would be best. Write a Swift program to generate such a table. You will want to be careful that your columns line up properly as shown. Otherwise, you will confuse the poor child.

1	2	3	4	5	6	7	8	9	10	11	12
2	4	6	8	10	12	14	16	18	20	22	24
3	6	9	12	15	18	21	24	27	30	33	36
4	8	12	16	20	24	28	32	36	40	44	48
5	10	15	20	25	30	35	40	45	50	55	60
6	12	18	24	30	36	42	48	54	60	66	72
7	14	21	28	35	42	49	56	63	70	77	84
8	16	24	32	40	48	56	64	72	80	88	96
9	18	27	36	45	54	63	72	81	90	99	108
10	20	30	40	50	60	70	80	90	100	110	120
11	22	33	44	55	66	77	88	99	110	121	132
12	24	36	48	60	72	84	96	108	120	132	144

Hints:

- 1) recall the difference between `print()` and `println()`.
- 2) You can achieve column alignment by using tabs or by using Swift's string class's numeric format specifier. For example, to force an integer, `myInt`, to take up exactly 5 characters, use the syntax

```
println(String(format: "%5d", myInt))
```

Now, whether `myInt` is equal to 4, 44, 444, 4444 or 44444, the output will always be 5 characters:

```
"    4"
"   44"
"  444"
" 4444"
"44444"
```

