Exercise 0.d (*Hint: nested for loops*)

A 3rd grade teacher is teaching her students multiplication, by introducing multiplication tables like below for the 4x table:

```
  1 2 3  4
1 1 2 3  4
2 2 4 6  8
3 3 6 9  12
4 4 8 12 16
```

Part A

She wants you to write a program that prints a multiplication table of size n x n to show the children all the multiplications of integers from 1 to n. Please print your output with a space between each row entry, and a newline between each row. The signature provided should be:

`void printMultTableInt(int n)` where n is the size of the multiplication table.

Example Output

printMultTableInt(6)

```
1 2 3 4 5 6
2 4 6 8 10 12
3 6 9 12 15 18
4 8 12 16 20 24
5 10 15 20 25 30
6 12 18 24 30 36
```

printMultTableInt(3)

```
1 2 3
2 4 6
3 6 9
```

printMultTableInt(10)

```
1 2 3 4 5 6 7 8 9 10
2 4 6 8 10 12 14 16 18 20
3 6 9 12 15 18 21 24 27 30
4 8 12 16 20 24 28 32 36 40
5 10 15 20 25 30 35 40 45 50
6 12 18 24 30 36 42 48 54 60
7 14 21 28 35 42 49 56 63 70
8 16 24 32 40 48 56 64 72 80
9 18 27 36 45 54 63 72 81 90
```

```
10 20 30 40 50 60 70 80 90 100
```

Part B

The teacher has now decided to introduce a fractional multiplication table of size n x n, where n is an integer size of how large she wants the table to be. The rows and columns of the table should now be 1/1, 1/2, 1/3, 1/4... 1/n, instead of 1, 2, 3 ... n as in Part A. Please use the signature provided in the starter code:

Please round your output to 2 decimal places. (*Hint: google string/print formatting with decimals*)

```
void printMultTableFrac(int n)
```

Example Output

printMultTableFrac(4)

```
1.00 0.50 0.33 0.25
0.50 0.25 0.17 0.12
0.33 0.17 0.11 0.08
0.25 0.12 0.08 0.06
```

printMultTableFrac(7)

```
1.00 0.50 0.33 0.25 0.20 0.17 0.14
0.50 0.25 0.17 0.12 0.10 0.08 0.07
0.33 0.17 0.11 0.08 0.07 0.06 0.05
0.25 0.12 0.08 0.06 0.05 0.04 0.04
0.20 0.10 0.07 0.05 0.04 0.03 0.03
0.17 0.08 0.06 0.04 0.03 0.03 0.02
0.14 0.07 0.05 0.04 0.03 0.02 0.02
```