

## CSE220 (Data structures) Lab Final

Set B

Time: 40 mins

|       |     |          |
|-------|-----|----------|
| Name: | ID: | Section: |
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Print the following pattern for the given input (**you must use recursion**): We basically first add 7 one by one until we reach **40 or more (but less than 47)**. After we reach 40 or more ( $<47$ ), we then reduce 7 until we reach n.

Sample Input 1:

18

Sample Output 1:

|    |    |    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|----|----|
| 18 | 25 | 32 | 39 | 46 | 39 | 32 | 25 | 18 |
|    | 25 | 32 | 39 | 46 | 39 | 32 | 25 |    |
|    |    | 32 | 39 | 46 | 39 | 32 |    |    |
|    |    |    | 39 | 46 | 39 |    |    |    |

Sample Input 2:

12

Sample Output 2:

|    |    |    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|----|----|
| 12 | 19 | 26 | 33 | 40 | 33 | 26 | 19 | 12 |
|    | 19 | 26 | 33 | 40 | 33 | 26 | 19 |    |
|    |    | 26 | 33 | 40 | 33 | 26 |    |    |
|    |    |    | 33 | 40 | 33 |    |    |    |