Task 1: Print following patterns, each in different programs: (For each pattern take input from user and generate pattern according to the input value). You may attempt these patterns in any order but try to keep file name relevant to each part.

a.   Sample Runs:

Rows: 5

```
A 1 B 1 2 C 1 2 3 D 1 2 3 4 E 1 2 3 4 5
F 1 G 1 2 H 1 2 3 I 1 2 3 4 J 1 2 3 4 5
K 1 L 1 2 M 1 2 3 N 1 2 3 4 O 1 2 3 4 5
P 1 Q 1 2 R 1 2 3 S 1 2 3 4 T 1 2 3 4 5
U 1 V 1 2 W 1 2 3 X 1 2 3 4 Y 1 2 3 4 5
```

Rows: 3

```
A 1 B 1 2 C 1 2 3
D 1 E 1 2 F 1 2 3
G 1 H 1 2 I 1 2 3
```

b.   Sample Runs:

N: 5

```
*           *           *
 *        * *         *
  *     *     *     *
   * *         * *
    *               *
```

N: 4

```
*           *         *
 *        * *       *
  * *         * *
   *         *
```

Hint: You may handle first and last line separately, because intermediate lines

c.

Rows: 4

```
|_          _|
  |_      _|
    |_  _|
      |_|
```

Rows: 3

```
|_        _|
  |_    _|
    |_|
```

d.   Rows: 5

```
    1
   212
  32123
 4321234
543212345
```

e.   Rows: 3

Column 6

$1+2+3+4+5+6=21$

$1+3+5+7+9+11=36$

$1+4+7+10+13+16=51$