© A+ Computer Science – Matrices

Lab Goal :   This lab was designed to teach you how to use a matrix, an array of arrays.

Lab Description :   Read in each number from the file and print out a pascal's triangle of that size.

Sample Data :

```
6
3
6
7
2
4
5
```

# of data sets in the file - 6

Files Needed ::
PascalsTriangle.java
PascalsTriangleRunner.java
triangle.dat

Sample Output :

```
1
1       1
1       2       1


1
1       1
1       2       1
1       3       3       1
1       4       6       4       1
1       5       10      10      5       1


1
1       1
1       2       1
1       3       3       1
1       4       6       4       1
1       5       10      10      5       1
1       6       15      20      15      6       1


1
1       1


1
1       1
1       2       1
1       3       3       1


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

algorithm help

  Basic Pascal's triangle rules are as follows. The first and last values of the row are always 1. The other values in the row are computed using the following formula :
  The ith value in the row = (i–1)st value of the previous row + the ith value in the previous row.
   For instance, the second value of the 4th row is 3 because the 1st and 2nd values of the 3rd row are 2 and 1.

```
//BONUS +30
//OUTPUT EACH TRIANGLE
//AS AN EQUILATERAL TRIANGLE

              1
           1    1
         1    2    1
       1    3    3    1
     1    4    6    4    1
   1    5   10   10    5    1
```