CS103

Assignment (1)
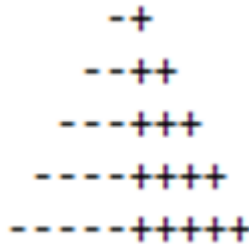
1. The area (A) and volume (v) of cylinder are calculated according to the following formulas:

   $$A = 2\pi r2 + 2\pi r h$$

   $$V = \pi r2 h$$

   Where (r) and (h) are the radius and the height of the cylinder respectively. Write a program (**cylinder.java**) to calculate (A) and (V) and print out the results. Note that (π) is approximately equal to (3.14). Use variables to give values for radius and height.

2. Using nested loops write a program (**pyramid.java**) that draw a pyramid as shown in the figure below.

   Hint: each row consists of even numbers of symbols.

3. Write a program (**digits.java**) that can print any of the six digits shown in the figure below. Use methods to draw the repeated parts. How many methods do need to print the six digits excluding the main method?