

Description:

- Write a program to print the accompanying tower figure. Use static methods with (nested) loops and a class constant, SIZE.
- Each print statement should print at most one of each character. Exception: “|” can be printed in a single print statement. It is also okay to print different characters within a single print statement. Use loops to handle other repeated characters or sets of characters.
- Eliminate all redundancy using methods and/or loops.
- Scaling of SIZE (using positive factors of 2 only) will affect both the height and width of the figure, as shown.
- Copy and paste your output for sizes 2, 4 and 6 into a text file (.txt). You can use notepad or word (save as text), then add a short reflections report in that file of how this project went.
 - How long did the project take from inception thru completion?
 - What parts of the project were straight-forward & what parts were difficult?
 - What aspects of this project do you feel will help you going forward?
 - Your reflections should be 3-5 sentences giving me an idea how the project went for you.

Process:

- Consider the image and decompose it into its various components. Write main, calling each static method, one for each component of the image, and write the method headers to ensure proper overall program “flow”. Use descriptive names for the methods, easily understood by the reader.
- Code one component at a time. Consider how each aspect of that component varies with respect to the given SIZE (and/or rows). Create table(s) and find the linear relationships for each character in the output and write appropriate loops.
- Use nested definite loops to create output for each component, with each print statement only printing a single character once—multiple occurrences of a character should be achieved using loops. Test your computations by changing SIZE and confirming that the output changes correctly before moving to another component

Submission:

- Upload your .java file along with your .txt output and reflections file to canvas.
- The reading quiz portion of the project is submitted first on canvas, and is to get you started on the project, with the project itself being due later thru a separate canvas assignment.

Grading Criteria, 25 points (including reading quiz):

- Use static method calls for each component of image, illustrating overall structure (5 pts)
- Use nested loops to print components and eliminate redundancy (5 pts)
- Use of descriptive names for methods and loop-variables (5 pts)
- Overall logic-flow is clear, with attention paid to minimize redundancy (5 pts)
- Clear introductory comment block (1 pt), output (SIZE 2,4 & 6) and reflections journal (2 pts), reading quiz (2 pts)