1a Draw a "non-obvious" rhombus tiling of a regular hexagon of size 6.

1b On top of it, draw the corresponding routing in the corresponding graph "G₆".
2a Draw a "non-obvious" routing in the graph $G_6$.

2b On top of it, draw the corresponding rhombus tiling of a regular hexagon of size 6.
3a Draw a "non-obvious" domino tiling of the "Aztec" diamond $AD_5$ (of height 10)

3b On top of it, draw the corresponding routing of 5 Schroder paths from $-i$ to $i$ ($i = 1, 2, 3, 4, 5$)
4a Draw a "non-obvious" routing of 5 Schröder paths from $-i$ to $i (i = 1, 2, 3, 4, 5)$

4b On top of it, draw the corresponding domino tiling of the Aztec diamond $AD_5$. 

![Diagram of Schröder paths and Aztec diamond tiling]
5a  Write down the larger of these two alternating sign matrices.

\[
\begin{array}{ccccccc}
0 & 0 & 0 & 0 & 0 & 1 & 0 \\
0 & 0 & 1 & 0 & 0 & 0 & \\
0 & 0 & 0 & 0 & 0 & 1 & \\
0 & 1 & -1 & 1 & 0 & 0 & \\
0 & 0 & 1 & 0 & 0 & 0 & \\
1 & 0 & 0 & 0 & 0 & 0 & \\
\end{array}
\]

5b  For this larger alternating sign matrix, draw the corresponding square ice configuration of H-O-H particles.