Exercise 1.
BWT

- For the text `tacaatacaacag$` construct the BWT and the arrays $C$ and $OCC$. Use them to search for the pattern `aca`.

Exercise 2.
BWT - compressing $L$

- Let $R$ be the MTF encoding of $L$ and $Y$ the corresponding list of characters. Give an algorithm in pseudocode to decode $R$ into $L$.

Exercise 3.
BWT - compressing $pos$

- Present an example that proves the following assumption stated in the script:
  If we mark every $\eta$-th row in the matrix $M$ the worst case time of a $pos$ query is $O\left(\frac{\eta-1}{\eta}n\right)$.