Exercises (Template and container classes)

1. Let A is a matrix with the size of *nxn*, and consider the following subset of matrix norm:

   - Frobenius norm

   $$||A||_F = \sqrt{\sum_{i,j} |a_{ij}|^2}$$

   - Row sum norm

   $$||A||_\infty = \max_i \sum_j |a_{ij}|$$

   - Total norm

   $$||A||_G = n \cdot \max_{i,j} \sum_j |a_{ij}|$$

   Write a program to implementand test the above norms.

2. Implement the linked list as described in Lecturer 12. Test your program (s).