

1. Work in groups of 2–4 people. List the members of your group below. Underline your name.
2. Trace the action of the *furthest-in-future* cache-replacement strategy on the following sequence of block requests, for a cache size of 4 blocks. Break ties by evicting the lower-numbered block. **Depict the state of the cache after each request** using the format **request: resulting-cache-contents**. State the **number of cache misses**.

9 6 0 5 1 8 7 0 7 2 1 1 3 4 9 9

3. Repeat Question 2 using the LRU (least-recently used) strategy.

4. Provide an sequence of block accesses for which LRU results in optimal cache use and another sequence for which it results in non-optimal cache use. (For the latter, try to generate a sequence that is as far from optimal as possible.)