Optimal

START

1. Input number of frames (n) and number of pages (m)

2. Input the page reference string

3. Initialize memory[] with -1 (empty)

4. For each page in the reference string:

a. If page is already in memory → no page fault

b. Else:

i. If memory has free space → add page

ii. Else:

- For each page in memory:

→ Look ahead to find when it will be used next

→ Choose the page with farthest next use (or not used again)

- Replace that page with current page

iii. Count a page fault

5. Print total page faults and memory content at each step

END