## Setup(N)

- 1. Allocate a buffer of N bytes.
- 2. Create a global pointer, p, and initialize p to the address of the first byte of the buffer.

## Output(D)

- 1. Place data byte D in the buffer at the position given by pointer p, and move p to the next byte.
- 2. If the buffer is full, make a system call to write the contents of the entire buffer, and reset pointer p to the start of the buffer.

## **Terminate**

- 1. If the buffer is not empty, make a system call to write the contents of the buffer prior to pointer p.
- 2. If the buffer was allocated dynamically, deallocate it.

Figure 17.9 The steps taken to achieve buffered output.