**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 dynamically allocated, deallocate it.

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**Figure 16.9** The steps taken to achieve buffered output.