**Lab 3. Producer and Consumer problem（15 Marks）**

* A buffer with 3 slots, initially are all empty.
* Two producers
  + Randomly wait for a period of time and put product into the buffer.
  + Wait if the buffer slots are all full
  + Repeat 6 times.
* Three consumers
  + Randomly wait for a period of time and fetch a product from the buffer.
  + Wait if the buffer slots are all empty.
  + Repeat 4 times.

Notes：

* Display the status of the buffer and the time when a product has been put into or removed from the buffer.
* Use process to simulate the consumer and producer.
* **Implement a Windows version and a Linux version.**