monitor servers vs. ordinary servers

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ordinary server
The service loop

```java
while (true) {
    req = receive_a_request();
    reply = process_request (req);  // computation
    dispatch_results(reply)
}
```
ordinary server, move the computation out
monitor server

wait till this call arrives
example

produce

state=FULL

wait till this call arrives

consume
example

state=EMPTY

wait till this call arrives

consume

produce
.. another possibility, can you program it?

wait till this call arrives

wait till this call arrives

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Result Server as a monitor server

```c
monitor resultserver {
    entry char getResult (unsigned int roll_no);
    entry void declareResult (unsigned int roll_no[], char grade[]);
}
```

```c
char resultserver :: getResult (..) {
    if result not yet out, r.wait();
    read result and return the grade
}
```

```c
void resultserver :: declareResult (..) {
    assign the input grade for the roll no. provided;
    r.signalAll();
}
```