$$A x = B$$

$$a_{11} x_1 + a_{12} x_2 \dots = b_1 \quad (-1)$$

$$a_{21} x_1 + \qquad\qquad = b_2$$

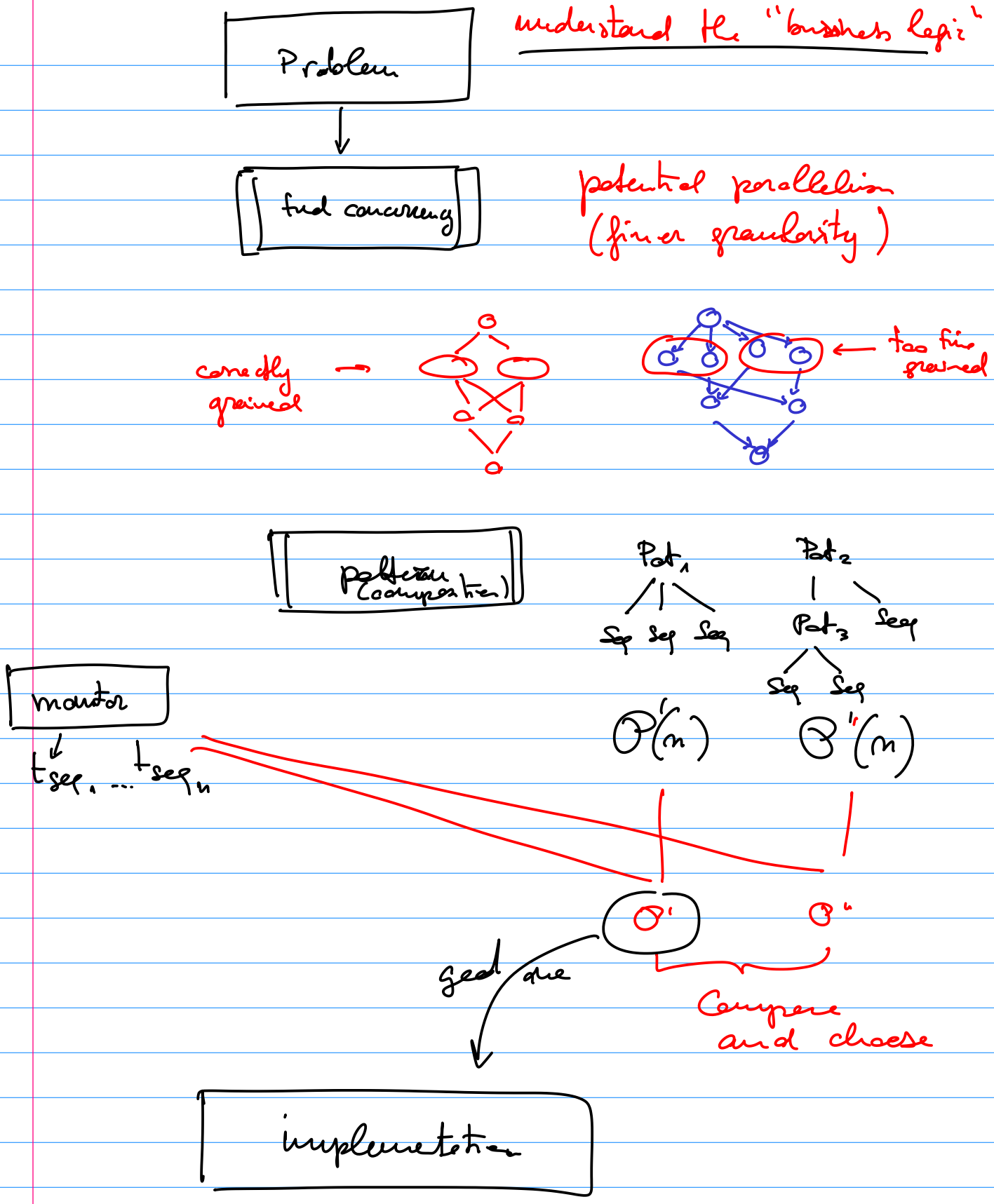
$$x_1 = \frac{b_1 - a_{12} x_2 - a_{13} x_3 \dots - a_{1n} x_n}{a_{11}}$$

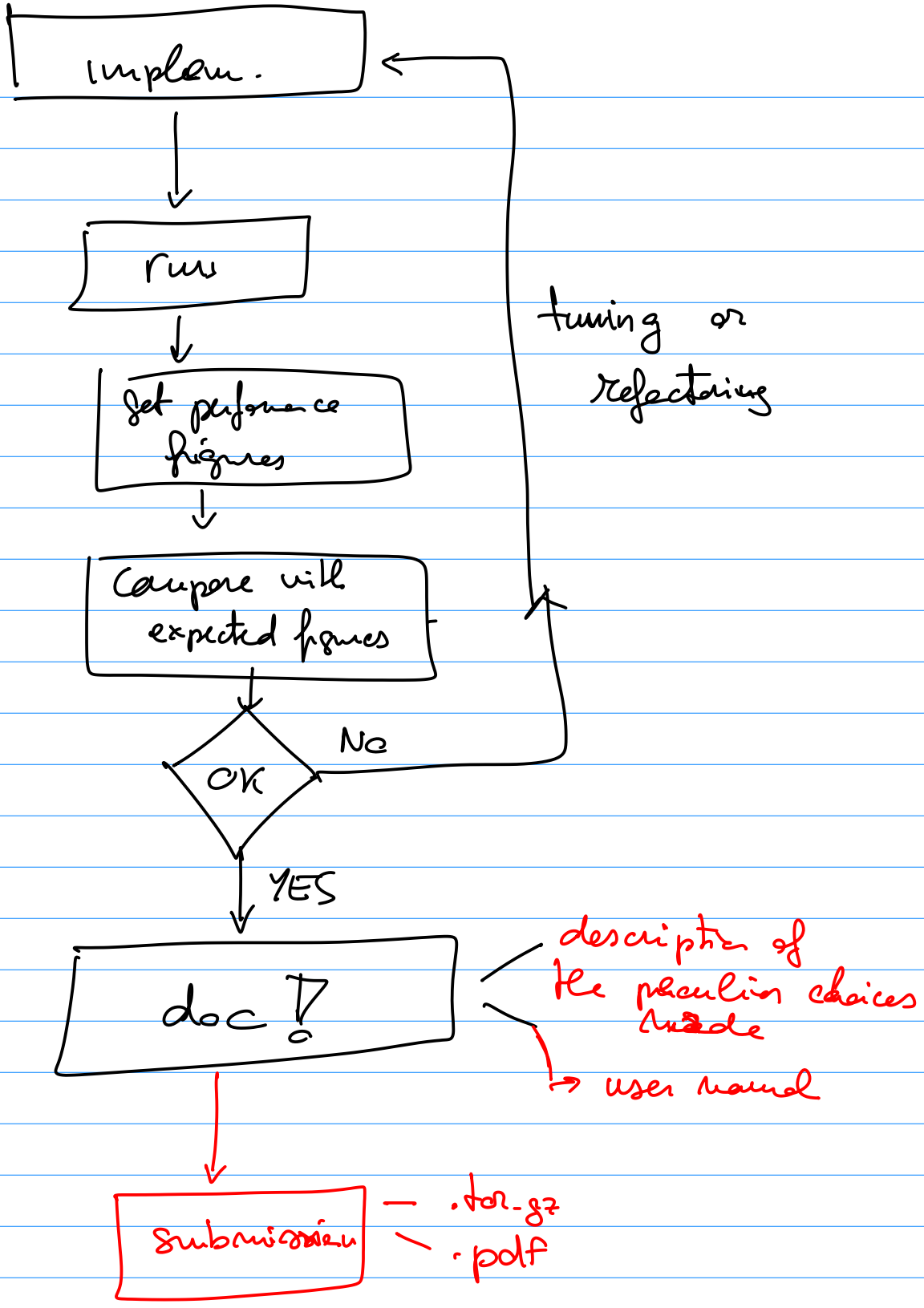
$$\begin{cases} x_1 = \\ x_2 = \\ \vdots \\ x_n = \end{cases}$$

$$\vec{x} = \vec{b} \qquad x_i = b_i$$

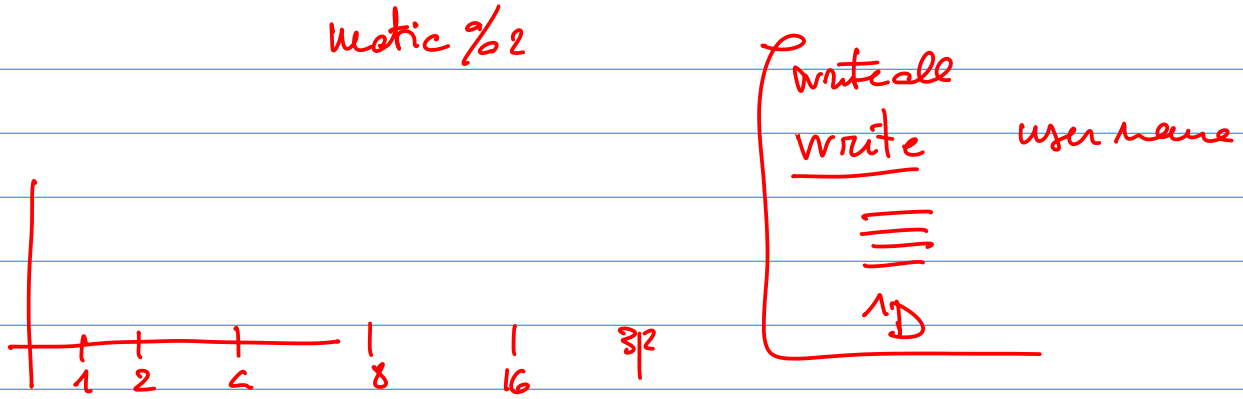
$$\begin{cases} x_1 = \dots \\ x_2 = \dots \end{cases}$$

$$\forall i \qquad x_i^{(iter+1)} = f\left(b_i, a_{ik}, x_*^{(iter)}\right)$$


Problem
understand the "business logic"
find concurrency
potential parallelism
(finer granularity)
coarsely grained
too fine grained
pattern (composition)
Pat1
Pat2
Pat3
Seq
Seq
Seq
Seq
Seq
monitor
tseq1 ... tseqn
T'(n)
T''(n)
T'
T''
Compare and choose
good one
implementation


implem.
run
set performance figures
compare with expected figures
OK
No
YES
doc
tuning or refactoring
description of the peculiar choices made
→ user manual
submission
— .tar.gz
— .pdf

MIC0 MIC1



a.out ~ nw

at [time] command [script]

```
for nw in 1 2 4 8
do
  w
  a.out ... $nw
done
```

```
int nw = atoi(argv[1])
```