Assignment #1

- Due Wednesday, October 18,
  - in tutorial or
  - by 5:00 p.m. in dropbox
  - Late penalty:
    - R by 5:00 –15%
    - F by 5:00 –30%
    - After that: 0
- java PageBreaker –l 72 –a bindent < file.txt | lpr
  - input from stdin, output to stdout
    - my gift to you
    - don't do more (hard for TA to execute)

Algorithm (-l 10)

```
 1: this is       +4  -9   =   -5
 2:               b
 3: a             +8  -7   =   +1
 4:               b
 5:               b
 6: test           0  -4   =   -4
 7: to see where   0  -3   =   -3
 8: the page      +4  -2   =   +2
 9:               b
10: will be        0   0   =    0
11: broken
12: That is all.
```

```
 1: this is
 2:
 3: a
 4:
 5:
 6: test
 7: to see where
 8: the page
 9:
10:
```

```
 1: will be
 2: broken
 3: That is all.
```


Algorithms

- blanks
- indents
- bindent
- ???

- Use intelligent, parameterizable weights.
- Ensure it is easy to add new algorithms
  - prepare for dynamic load
  - implement dynamic load for a bonus
- Ensure it is easy to combine algorithms
  - prepare for expression language
  - implement for a boinus
    - e.g., `-a 'blanks*2 + indents*0.5'`

Hand In

- Working java
  - ensure your java is on CDF, accessible to Kenneth, and works to spec.
    - tell Kenneth where it is!
  - Nicely formatted and organized printouts
  - Print outs of sample inputs and outputs
- Design documentation
  - UML static class diagram
  - Brief description of all classes in the UML
  - Write-up explaining the design
    - tradeoffs
    - patterns used

Marking Scheme

- execution (25%)
- quality of work products (25%)
  - UML, design writeup, code, tests
- quality of the design (25%)
- knowing use of patterns (25%)

Bonus

- dynamic loading of classes (invoke class loader) (+5% absolute)
- expression language (+5% absolute)

Bewares

- If the quality of the work products is so bad that Ken can't figure them out
  - you get 0 on patterns and design as well!
- Plagiarism!
  - lonesome, solitary exercise
  - NOT A GROUP ACTIVITY!
  - we'll be looking hard for cheats!