September 23 PLT Group Meeting

Git Review
- master
  - proposal
    ```
    fetch origin              // origin = name of repo
    fetch origin proposal     // proposal = name of branch
    checkout proposal         // checkout proposal
    pull origin               // merge other's changes
    push
    ```

- Additions from Kuangya:
  When you checking out a branch, do remember to use the --track option. For example, when you want to work on the proposal branch, use:

  git branch --track proposal remotes/origin/proposal

  Only by doing this, git will know the relation between remote and local branches. And when you push and pull changes, git will know which branches to merge. It will make your life much easier. If you have already have proposal branch on your local directory, feel free to delete it with "git branch -D proposal" command.

Language Updates
- Change `Figure` to `Measure` (still [`Chord`])
  - `Measure` can only have 4 beats (compiler enforced)
- Add `Score` -> [`Measure`] (group of measures)
- Built in function `gen_score` (keyword) with score as argument
- Add keyword `in` to accompany `let` (allows local variable binding in expression)
- Move all keywords that are not words (ex :, ::) to operators list
- Add = (assignment) and == (Boolean) to operators
- Library functions
  ```
  prime = [0,6,…,5,2]
  P3 = trans 3 prime     :: Int -> [] -> []
  I3 = inver P3          :: [] -> []
  RI3 = rev I3
  ```
- Rests represented as `Note` where pc is -1, added to measures
- Example function
  ```
  firstNotes = rowToNotes P3 [4,4,…,4] [0,0,…,0]
  firstMeasure = (head firstNotes) : <rest> : ((head
                 (tail firstNotes)) : (<rest> : []))
  gen_score [firstMeasure]
  ```

  `<rest>` represents a rest note such as (-1,4,0)