Exercise 3:

Repeat Exercise 2, except BRANCH from the end of Exercise.2.
Turn off ice runoff in the land model and quadruple CO2. Run 1 month. Restart
for 1 month.

1. create_newcase -case ~/b.day2.3 -res T31_gx3v7 -mach bluefire
-compset B_1850_CN

    cd ~/b.day2.3

Notes:can't clone exercise 2. exercise 2 is a hybrid and exercise 3 is a branch.
too many subtle script differences

2. xmlchange -file env_run.xml -id INFO_DBUG -val 2
   xmlchange -file env_run.xml -id STOP_N   -val 1
   xmlchange -file env_run.xml -id STOP_OPTION -val nmonths
   xmlchange -file env_run.xml -id RESUBMIT -val 1

3. vi (or emacs) env_run.xml to change LOGDIR to /glade/scratch/$CCSMUSER/logs/$CASE, or
   xmlchange -file env_run.xml -id LOGDIR -val '/glade/scratch/$CCSMUSER/logs/$CASE'

4. xmlchange -file env_conf.xml -id CCSM_CO2_PPMV -val 1138.8

5. xmlchange -file env_conf.xml -id CLM_NAMELIST_OPTS -val ice_runoff=.false., or
   don't specify anything for ice_runoff...default value is false

***Stuff for FOR BRANCH
6. xmlchange -file env_conf.xml -id RUN_TYPE -val branch
7. xmlchange -file env_conf.xml -id RUN_REFDATE -val 0001-02-01
8. xmlchange -file env_conf.xml -id RUN_REFCASE -val b.day2.2
9. xmlchange -file env_conf.xml -id GET_REFCASE -val FALSE
***end Stuff for FOR BRANCH

NOTES: steps 7 and 8 refer to the restart files created at the end of exercise 2.
if the students run a different time length, then they can restart from
whatever restart files they have.

10. configure -case

11. Manually update your README.case file to reflect changes

12. b.day2.3.bluefire.build

***Stuff for FOR BRANCH
13.   cp /glade/scratch/$LOGNAME/archive/b.day2.2/rest/0001-02-01-00000/rpointer*
/glade/scratch/$LOGNAME/b.day2.3/run/.
      cp /glade/scratch/$LOGNAME/archive/b.day2.2/rest/0001-02-01-00000/b.day2.2*
/glade/scratch/$LOGNAME/b.day2.3/run/.

Notes: restart files may still be in exercise 2 rundir, you can copy them from
this space too. Also, if the students are branching from a different date,
the date stamp will be different than the above example.
***end Stuff for FOR BRANCH

14. Edit b.day2.3.bluefire.run and check the following to BSUB lines:
                      a) #BSUB -P 37591064
                      Note this is for tutorial purposes ONLY.

15. b.day2.3.bluefire.submit