

Please download the files [words.txt](#) and [Assignment-Bash-regex.bash](#).

Your assignment is to modify "Assignment-Bash-regex.bash" to recognize words in the words.txt file matching five different regular expressions.

Please change the values of the variables named "regex1" through "regex5" to so that each of those are an extended regular expression (i.e., it must use a regular expression with back references), and it must contain no single, fixed characters; use only character classes such as "\w" or "[:alpha:]" to refer to elements of the Latin alphabet. (I.e., you cannot write regex2 as regex2="^(r)(e)(d)\3\2\1\$", although of course that does match the single six letter palindrome in the file.)

"regex1" should recognize these (and only these) five letter palindromes from words.txt:

civic
kayak
level
madam
minim
radar
refer
rotor
sagas
sexes
shahs
solos
stats
tenet

"regex2" should recognize this six letter palindrome from words.txt (and nothing else):

redder

"regex3" should recognize this seven letter palindrome from words.txt (and nothing else):

deified

"regex4" should recognize these words that contain at least two instances of the same doubled characters (and no other words); for example, "willfully" should be recognized since it has "ll" twice, and "riffraff" should be recognized since it contains "ff" twice):

Boccaccio
Chancellorsville
Greensleeves
Mississauga
Mississippi
Mississippian
Mississippians
Okeechobee
Tweedledee
aggressiveness
aimlessness
allegorically
artlessness
assassin
assassinate
assassinated
assassinates
assassinating
assassination
assassinations
assassins
assertiveness
assess
assessed

assesses
assessing
assessment
assessments
assessor
assessors
assiduousness
beekeeper
beekeepers
beekeeping
blessedness
blissfulness
bossiness
breathlessness
carelessness
cheerlessness
childlessness
classiness
classless
colloquially
cookbook
cookbooks
crassness
crisscross
crisscrossed
crisscrosses
crisscrossing
crossness
dauntlessness
dillydallied
dillydallies
dillydally
dillydallying
dispossess
dispossessed
dispossesses
dispossessing
dispossession
dissoluteness
dressiness
elliptically
endlessness
expressionless
expressiveness
faithlessness
fearlessness
flibbertigibbet
flibbertigibbets
foolproof
footloose
footstool
footstools
formlessness
freebee
freebees
freewheel
freewheeled
freewheeling
freewheels
fruitlessness
fussiness
glossiness
gracelessness
grossness
harmlessness
heartlessness
heedlessness

helplessness
hillbillies
hillbilly
homelessness
hoodoo
hoodooed
hoodooing
hoodoos
hopelessness
humorlessness
illegally
illogically
impressiveness
intellectually
joblessness
lawlessness
listlessness
massiveness
messiness
mindlessness
muumuu
muumuus
noiselessness
paralleled
paralleling
passionless
peewee
peewees
permissiveness
pizzazz
pointlessness
possess
possessed
possesses
possessing
possession
possessions
possessive
possessively
possessiveness
possessives
possessor
possessors
powerlessness
prepossess
prepossessed
prepossesses
prepossessing
prissiness
reassess
reassessed
reassesses
reassessing
reassessment
reassessments
recklessness
relentlessness
remissness
repossess
repossessed
repossesses
repossessing
repossession
repossessions
restlessness
riffraff
ruthlessness

schoolbook
schoolbooks
schoolroom
schoolrooms
scuttlebutt
selflessness
senselessness
shapelessness
shiftlessness
skillfully
sleeplessness
spotlessness
squeegee
squeegeed
squeegeeing
squeegees
tactlessness
tastelessness
teepee
teepees
thoughtlessness
timelessness
tirelessness
uselessness
volleyball
volleyballs
voodoo
voodooed
voodooing
voodooism
voodoos
weightlessness
whippersnapper
whippersnappers
willfully
worthlessness

"regex5" should recognize the following words that contain at least three instances of doubled characters (and no other words); "bookkeeper" should be recognized, since it has "oo", "kk", and "ee", and "keenness" should be recognized since it has "ee", "nn", and "ss".

Chattahoochee
Mississippi
Mississippian
Mississippians
Tallahassee
Tennessee
addressee
addressees
aggressiveness
barrenness
bookkeeper
bookkeepers
bookkeeping
cheerlessness
committee
committees
greenness
heedlessness
keenness
noncommittally
possessiveness
rottenness
sleeplessness
stubbornness
subcommittee
subcommittees

successfully
suddenness
sullenness
unsuccessfully
whippoorwill
whippoorwills
woodenness
woolliness

Please submit your `Assignment-Bash-regex.bash` file on Canvas by 11:59pm on Sunday, September 29 (you don't have to tar it up.)