Homework 8

Shell in Python

#!/usr/bin/python

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#6 December 2012

import re

import sys

import os

def getargs(myIn):

returnValue = re.search('^[^#]\*', myIn).group().split()

i = 0

while(i < len(returnValue)):

if(returnValue[i][0] == '$'):

returnValue[i] = os.getenv(returnValue[i][1:])

i += 1

return returnValue

def execute(myIn):

childpid = os.fork()

if(childpid == 0):

os.execvp(myIn[0], myIn)

else:

os.waitpid(childpid, 0)

def main():

argc = len(sys.argv)

if(argc >= 2):

sys.stdin = file(sys.argv[1])

myIn = getargs(sys.stdin.readline())

execute(myIn)

exit()

while(1):

print"%% ",

myIn = getargs(sys.stdin.readline())

print myIn

if(len (myIn) > 0 and (myIn[0] == 'exit' or myIn[0] == 'logout')):

exit()

else:

execute(myIn)

main()