"""

Student: Robin G. Blaine

Date: October 18, 2017

Class: \_Python Programming

Assignment (Module 1, Chapter 3, Project 7)

Pseudocode:

Input startingSalary

Input percentageIncrease

Input numberOfYears

currentSalary = startingSalary

For year = 1 to numberOfYears+1

Output "Year number: ", year, " Salary: $", currentSalary

currentSalary \*= (1 + percentageIncrease/100)

"""

startingSalary = float(input("Enter starting salary: $"))

currentSalary = int(startingSalary \* 100)

percentageIncrease = float(input("Enter the percentage of annual salary increase: %"))

numberOfYears = int(input("Enter the number of years: "))

print("")

for year in range (1, numberOfYears + 1):

print("Year number: %4s" % year,

" Salary: $%8.2f" % (currentSalary / 100))

currentSalary = int(currentSalary \* (1 + percentageIncrease/100) + .5)

"""

Student: Robin G. Blaine

Date: October 18, 2017

Class: \_Python Programming

Assignment (Module 1, Chapter 3, Project 10)

Pseudocode:

Input purchasePrice

month = 1

downPayment = purchasePrice \* .10

currentBalance = purchasePrice - downPayment

monthlyPayment = currentBalance \* .05

annualInterestRate = .12

monthlyInterestRate = annualInterestRate / 12

Output ("Down Payment: $", downPayment)

While (currentBalance > 0):

monthlyInterest = currentBalance \* monthlyInterestRate

If (currentBalance < monthlyPayment + monthlyInterest):

monthlyPayment = currentBalance + monthlyInterest

monthlyPrincipal = monthlyPayment - monthlyInterest

newBalance = currentBalance + monthlyInterest - monthlyPayment

Output ("Month: ", month,

"Balance: $", currentBalance,

"Monthly Interest: $", monthlyInterest,

"Monthly Payment: $", monthlyPayment,

"Remaining Balance: $", newBalance)

currentBalance = newBalance

month = month + 1

"""

purchasePrice = float(input("Enter the purchase price: $"))

print("")

month = 1

downPayment = int(purchasePrice \* .10 \* 100 + .5) / 100

currentBalance = purchasePrice - downPayment

monthlyPayment = int(currentBalance \* .05 \* 100 + .5) / 100

annualInterestRate = .12

monthlyInterestRate = annualInterestRate / 12

print("Down Payment: $%-8.2f" % downPayment)

print("")

while currentBalance > 0:

monthlyInterest = int(currentBalance \* monthlyInterestRate \* 100 + .5) / 100

if currentBalance < monthlyPayment + monthlyInterest:

monthlyPayment = currentBalance + monthlyInterest

monthlyPrinciple = monthlyPayment - monthlyInterest

newBalance = currentBalance + monthlyInterest - monthlyPayment

print("Month: %4s" % month,

"Balance: $%-10.2f" % currentBalance,

"Monthly Interest: $%-9.2f" % monthlyInterest,

"Monthly Payment: $%-9.2f" % monthlyPayment,

"Remaining Balance: $%-10.2f" % newBalance)

currentBalance = newBalance

month += 1

"""

Student: Robin G. Blaine

Date: October 18, 2017

Class: \_Python Programming

Assignment (Module 1, Chapter 3, Project 11): Lucky Sevens

Pseudocode:

Input startingPot ("Enter the amount in the pot: $")

rollNumber = 1

currentPot = startingPot

maxPot = startingPot

While currentPot > 0:

roll = random(1 to 6) + random(1 to 6)

if roll = 7:

currentPot += 4

if currentPot > maxPot:

maxPot = currentPot

else:

currentPot -= 1

rollNumber += 1

Output ("Number of rolls to break the pot: ", rollNumber)

Output ("Maximum pot: $", maxPot)

"""

import random

startingPot = int(input("Enter the amount in the pot: $"))

print("")

rollNumber = 1

currentPot = startingPot

maxPot = startingPot

while currentPot > 0:

roll = random.randint(1, 6) + random.randint(1, 6)

if roll == 7:

currentPot += 4

if currentPot > maxPot:

maxPot = currentPot

else:

currentPot -= 1

# print("Roll #%-4s" % rollNumber,

# "You rolled: %-4s" % roll,

# "Current Pot: $%-8s" % currentPot,

# "Maximum Pot: $%-8s" % maxPot)

rollNumber += 1

# print("")

# print("Starting pot: $%-8s" % startingPot)

print("Number of rolls to break the pot: %-4s" % rollNumber)

print("Maximum pot: $%-8s" % maxPot)