#variables

score\_rate = 0

total\_string = 0

upper\_count = 0

upper\_score = 0

lower\_count = 0

lower\_score = 0

num\_count = 0

num\_score = 0

upper\_point\_reduce = 0

lower\_point\_reduce = 0

num\_point\_reduce = 0

symbol\_count = 0

symbol\_score = 0

#creates a requirement subroutine called main

def main ():

OUTPUT ("\*\*\* Password must include 8 - 15 characters \*\*\*")

OUTPUT ("\*\*\* Password must include upper and lower case characters\*\*\*")

OUTPUT ("\*\*\* Password must include special characters (eg: !%&\*+=) \*\*\*")

#runs subroutine main

main ()

#creates a score rating subroutine called score\_ratings

def score\_ratings () THEN

OUTPUT ("\*\*\* very low == 20 points or less \*\*\*")

OUTPUT ("\*\*\* Low == 21- 40 points \*\*\*")

OUTPUT ("\*\*\* Medium == 41- 70 points \*\*\*")

OUTPUT ("\*\*\* High == 71- 80 points \*\*\*")

OUTPUT ("\*\*\* Very High == 81 points and above \*\*\*")

#runs subroutine score\_ratings

score\_ratings()

#userinput password and length counter for password characters

password = USERINPUT("Enter a password : ")

length = len (password)

letter\_count = length

#min and max requirement repeat loops

while length < 8 THEN

password = USERINPUT ("Re-Enter a password with more character: ")

length = len (password)

OUTPUT ("characters in password = " , length)

while length > 15 THEN

password = input ("Re-Enter a password with less character: ")

length = len (password)

OUTPUT ("characters in password = " , length)

Else THEN

length = len (password)

OUTPUT ("password contains 8-15 characters")

OUTPUT ("your password contains a total characters of : " , length)

#variables assigned boolean value

lowercase = False

uppercase = False

num = False

symbol = False

# if password is boolean true and matches valid inputs

FOR character in password:

IF character in "abcdefghijklmnopqrstuvwxyz":

lowercase = TRUE

ELIF character in "ABCDEFGHIJKLMNOPQRSTUVWXYZ":

uppercase = TURE

ELIF character in "0123456789":

num = TRUE

ELIF character in "!%&\*+-=":

symbol = TRUE

END IF

#\*\*\* check for numbers in string = +1 to num count

FOR i in password THEN

IF i.isdigit() THEN

num = TRUE

num\_count = num\_count+1

num\_score = num\_count \* 10

ENDIF

# check for upper and lower characters = +1 to counter for upper and lower

FOR i in password THEN

IF i.isupper() THEN

uppercase = TRUE

upper\_count= length

upper\_score = upper\_count \* 5

ENDIF

# checks if password has lower case if yes then each + 5 for score

FOR i in password THEN

IF i.islower() THEN

lowercase = TRUE

lower\_count= length

lower\_score = lower\_count \* 5

ENDIF

#checks if password uses special char. if yes then + 10 for each

IF symbol == TRUE THEN

symbol\_count = length

symbol\_score = symbol\_count \* 10

ENDIF

# re assign score\_rate by adding all other score values

score\_rate = upper\_score + lower\_score + num\_score + symbol\_score

#

letter\_count = upper\_count + lower\_count + num\_count + symbol\_count

# checks if uppercase is true. calcuates how much points to reduce

IF uppercase == TRUE THEN

upper\_point\_reduce = upper\_count\*3

score\_rate = score\_rate - upper\_point\_reduce

ENDIF

#checks if lowercase is true. calculates how much points to reduce

IF lowercase == TRUE THEN

lower\_point\_reduce = lower\_count\*3

score\_rate = score\_rate - lower\_point\_reduce

ENDIF

#checks if numbers are true. calculates how much points to reduce

IF num == TRUE THEN

num\_point\_reduce = num\_count\*3

score\_rate = score\_rate - num\_point\_reduce

print("you have lost ",num\_point\_reduce,"reduced because your password is numbers only")

ENDIF

# adds 20 points if password has over 10 char

IF letter\_count >= 10 THEN

score\_rate = score\_rate + 20

OUTPUT ("20 additional points added because you have more than 10 letters")

ELSE THEN

OUTPUT ("")

#prints score

OUTPUT ("your score rate is ", score\_rate)

# nested elif shows score ratings.

IF score\_rate <= 20 THEN

OUTPUT("Your password is rated very low")

ELIF score\_rate >= 21 and score\_rate <= 40 THEN

OUTPUT ("Your password is rated low")

ELIF score\_rate >=41 and score\_rate <= 70 THEN

OUTPUT ("Your password is rated medium")

ELIF score\_rate >= 71 and score\_rate <= 80 THEN

OUTPUT ("Your password is rated high")

ELSE THEN

OUTPUT ("You have a very high")

ENDIF