print("Hello User Please Create A Valid Password. \nInclude at least one lowercase character \nAt least one uppercase character \nAt least one number \nAnd at least one special character.")  
  
# Create a password checker using 8 characters with atleast one uppercase, lowercase and special character  
# special character and a minimum of 8 characters long  
  
password = input("Type your password:")  
  
lowercase = False # checks lowercase letters first rule  
for character in password:  
 if character in "abcdefghijklmnopqrstuvwxyz":  
 lowercase = True  
  
if lowercase == True:  
 print("Your password contains at least 1 lowercase character.") # if lowercase is their it's good if not  
elif lowercase == False: # prints need a lowercase letter  
 print("Your password needs at least 1 lowercase character.")  
  
uppercase = False # checks for uppercase letter second rule  
for character in password: # checks for one uppercase letter if not  
 if character in "ABCDEFGHIJKLMNOPQRSTUVWXYZ": # prints needs a uppercase letter  
 uppercase = True  
  
if uppercase == True:  
 print("Your password contains at least 1 uppercase letter.")  
elif uppercase == False:  
 print("Your password needs at least 1 uppercase letter.")  
  
numbers = False # checks for number third rule  
for character in password: # checks for one number if not  
 if character in "0123456789": # prints needs a number  
 numbers = True  
  
if numbers == True:  
 print("Your password contains at least 1 number.")  
elif numbers == False:  
 print("Your password needs at least 1 number.")  
  
special\_character = False # checks for special character fourth rule  
for character in password: # checks for one special character if not  
 if character in "@&!%\*#$?+-=()[]{}": # prints need a special character  
 special\_character = True  
  
if special\_character == True:  
 print("Your password contains at least 1 special character.")  
elif special\_character == False:  
 print("Your password needs at least 1 special character.")  
  
if len(password)<8: # checks to see if password is 8 characters long  
 print("Your password needs at least 8 characters.") # if good says password has eight characters  
elif len(password)>=8: # if not says passwords needs 8 characters  
 print("Your password has at least 8 characters.")  
 if lowercase == True: # this last part checks all the rules using if  
 if uppercase == True: # statements and will only continue if statement  
 if numbers == True: # is true if all statements are true it prints  
 if special\_character == True: # your password meets all requirements  
 print("Your password meets all requirements. \nHere is your encrypted password. \nPlease save the key somewhere safe.")  
  
 from cryptography.fernet import Fernet # downloads needed files  
  
 key = Fernet.generate\_key() # creating the encryption key  
  
 crypter = Fernet(key)  
  
 print(key)