Flow chart

statement

decision

Output

end
print("Welcome to System Security Inc. ")
print("-- where security is our middle name\n")

password = input("Enter your password: ")

if password == "secret":
    print "Access Granted"

input("\n\nPress the enter key to exit."")
Raw_input → Password

Password == "secret"

F → "access denied"
T → "access granted"

end
decision
if <proposition>:
    <statement>
    <statement> (optional)
else:
    <statement>
    <statement> (optional)
<other statements>
Propositions in Python

5 == 5               equal
8 != 5               not equal
3 > 10
5 < 8
5 >= 10
5 <= 5
if <proposition>:
  <statement>
  <statement> (optional)
elseif <proposition>:
  <statement>
  <statement> (optional)
  ...
else:
  <statement>
  <statement> (optional)
<other statements>
# Three Year-Old Simulator
# Demonstrates the while loop

print("\tWelcome to the 'Three-Year-Old Simulator'\n")
print("This program simulates a conversation with a three-year-old child.")
print("Try to stop the madness.\n")

response = ""
while response != "Because.":
    response = input("Why?\n")

print("Oh. Okay."

input("\n\nPress the enter key to exit."
while <proposition> :
    <statement>
    <statement> (optional)
    <other statements>
print("Welcome to System Security Inc. ")
print("-- where security is our middle name\n")

password = ""
count = 0
while (password != "secret") & (count <= 3):
    print "Access Denied"
    count = count + 1
    password = input("Enter your password: ")

If ...
print("Access Granted")

input("\n\nPress the enter key to exit.")

Modify this program to give more chances..
<table>
<thead>
<tr>
<th>P1</th>
<th>P2</th>
<th>&amp;</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
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<td>F</td>
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</tbody>
</table>
# Password
# Demonstrates the if structure
print("Welcome to System Security Inc.")
print("-- where security is our middle name\n")

password = input("Enter your password: ")
numberOfTry = 1;
while (password.lower() != "secret") & (numberOfTry < 3):
    print("Access Denied -- tried ", numberOfTry, " times.")
    password = input("Enter your password: ")
    numberOfTry = numberOfTry + 1;

if password.lower() != "secret":
    print("Access Denied after ", numberOfTry, " times.")
else:
    print("Access Granted")

input("\n\nPress the enter key to exit.")
# Password
# Demonstrates the if structure
print("Welcome to System Security Inc.")
print("-- where security is our middle name
")

password = input("Enter your password: ")
numberOfTry = 1;
while (password.lower() != "secret") & (password.lower() != "secret2") & (numberOfTry < 3):
    print("Access Denied -- tried ", numberOfTry, " times.")
    password = input("Enter your password: ")
    numberOfTry = numberOfTry + 1;

if password.lower() != "secret":
    print("Access Denied after ", numberOfTry, " times.")
else:
    print("Access Granted")

input("\n\nPress the enter key to exit.")
print("tExclusive Computer Network")
print("t\tMembers only!\n")

security = 0

username = ""
while not username:
    username = input("Username: ")

password = ""
while not password:
    password = input("Password: ")

if username == "M.Dawson" and password == "secret":
    print("Hi, Mike.")
    security = 5
elif username == "S.Meier" and password == "civilization":
    print("Hey, Sid.")
    security = 3
elif username == "S.Miyamoto" and password == "mariobros":
Counting

- While loop
- For loop
# Counter
# Demonstrates the range() function

print("Counting:")
i = 10
while i > 0:
    print i,
    i = i - 1

for i in range(10): // (0, 10, 1) (start, exit, change)
    print(i, end=" ")

print("\n\nCounting by fives:")
for i in range(0, 50, 5):
    print(i, end=" ")

print("\n\nCounting backwards:")
for i in range(10, 0, -1):
    print(i, end=" ")

input("\n\nPress the enter key to exit.\n")
# Loopy String
# Demonstrates the for loop with a string

word = input("Enter a word: ")

print("\nHere's each letter in your word:")
for letter in word:
    print(letter)

input("\n\nPress the enter key to exit.")
for <index_variable> in <index control>:
    <statement>
    <statement> (optional)
    <other statements>
for  `<integer_variable>`  in range (start, end, skip):
  `<statement>`
  `<statement>` (optional)
  `<other statements>`
# Password
# Demonstrates the if structure
print("Welcome to System Security Inc. ")
print("-- where security is our middle name\n")

password = input("Enter your password: ")
numberOfTry = 1;
while (password.lower() != "secret") & (numberOfTry < 3):
    print("Access Denied -- tried ", numberOfTry, " times.")
    password = input("Enter your password: ")
    numberOfTry = numberOfTry + 1;
    if (password == "secret"):
        break

if password.lower() != "secret":
    print("Access Denied after ", numberOfTry, " times. ")
else:
    print("Access Granted")

input("\n\nPress the enter key to exit.")
for <index_variable> in <index control>:
    <statement>
    <statement> (optional)
    <other statements>
# Password
# Demonstrates the if structure
print("Welcome to System Security Inc.")
print("-- where security is our middle name")

for i in range(0,3,1):
    password = input("Enter your password: ")
    if password.lower() == "secret":
        print("Access Granted")
        break
    print("Access Denied -- tried ", (i+1), ", " times.")

input("\n\nPress the enter key to exit.")
# Random Access
# Demonstrates string indexing

import random

word = "pizza"
print("The word is: ", word, "\n")

high = len(word)
low = -len(word)

for i in range(10):
    position = random.randrange(low, high)
    print("word[", position, "]\t", word[position])

input("\n\nPress the enter key to exit.")
<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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<tr>
<td></td>
<td>-5</td>
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<td>-3</td>
<td>-2</td>
<td>-1</td>
</tr>
</tbody>
</table>
print("Enter the beginning and ending index for your slice of 'pizza'. ")
print("Press the enter key at 'Begin' to exit.")

begin = None
while begin != "":
    begin = (input("\nBegin: "))

    if begin:
        begin = int(begin)

        pend = int(input("End: "))

        print("word[", begin, ":", pend, "]\t\t", end=" ")
        print(word[begin:pend])

input("\n\nPress the enter key to exit.")
# create a tuple with some items
inventory = ("sword",
    "armor",
    "shield",
    "healing potion")

# print the tuple
print("\nThe tuple inventory is:\n", inventory)

# print each element in the tuple
print("\nYour items:")
for item in inventory:
    print(item)
    if "UCDavis" in item:
        print("Google ", item)
        GoogleList += item

GoogleList.sort()