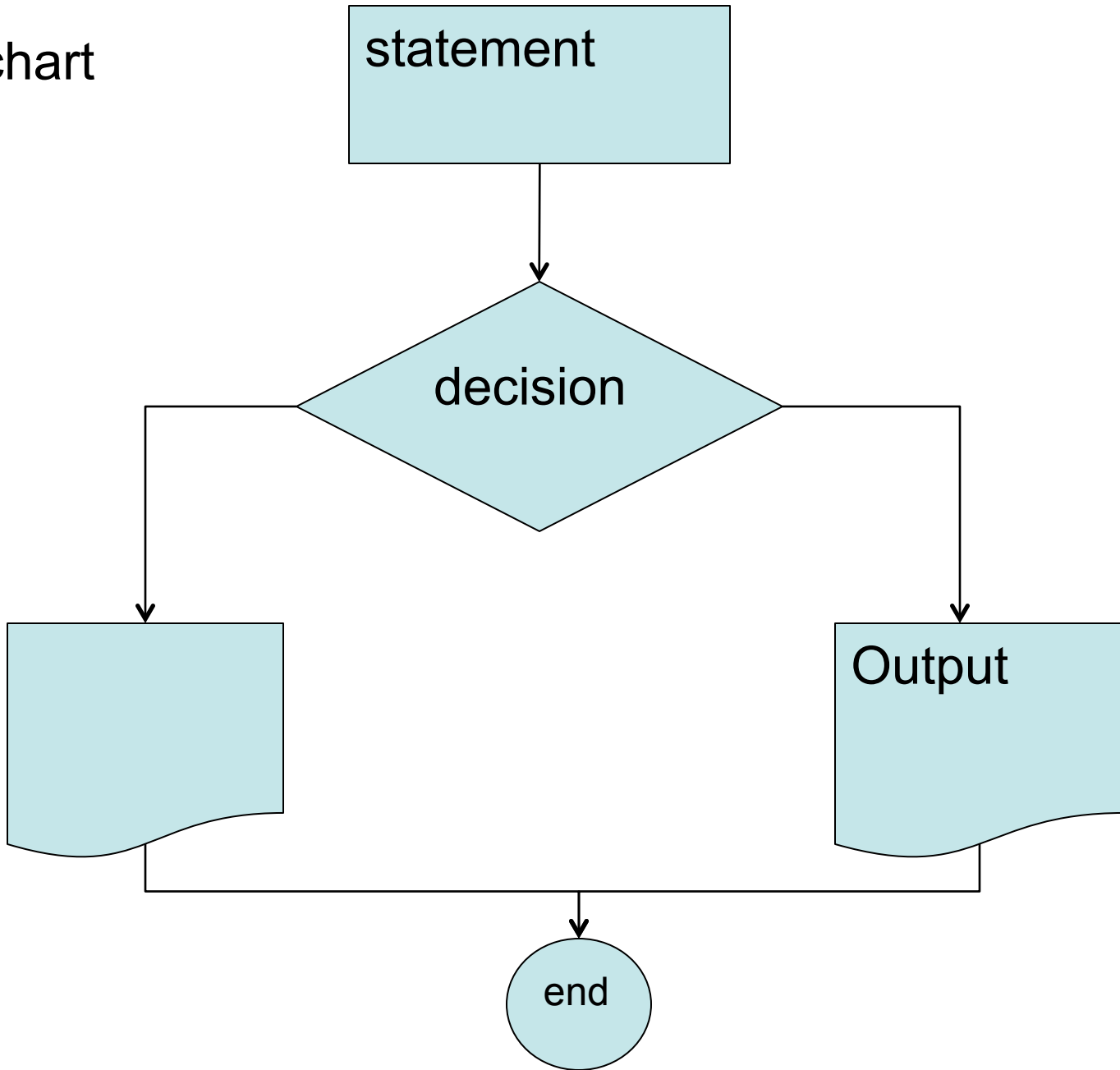


Flow chart

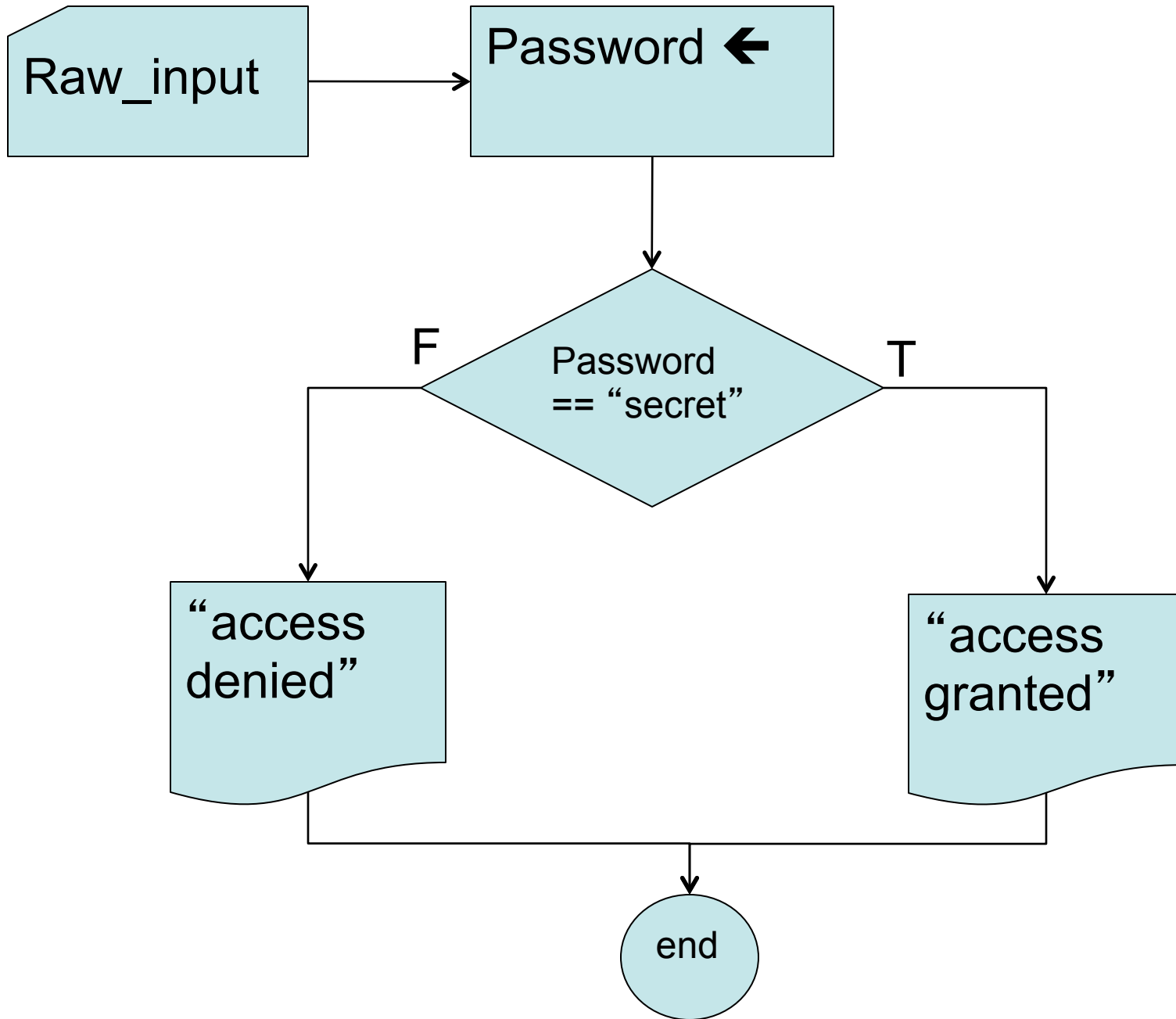


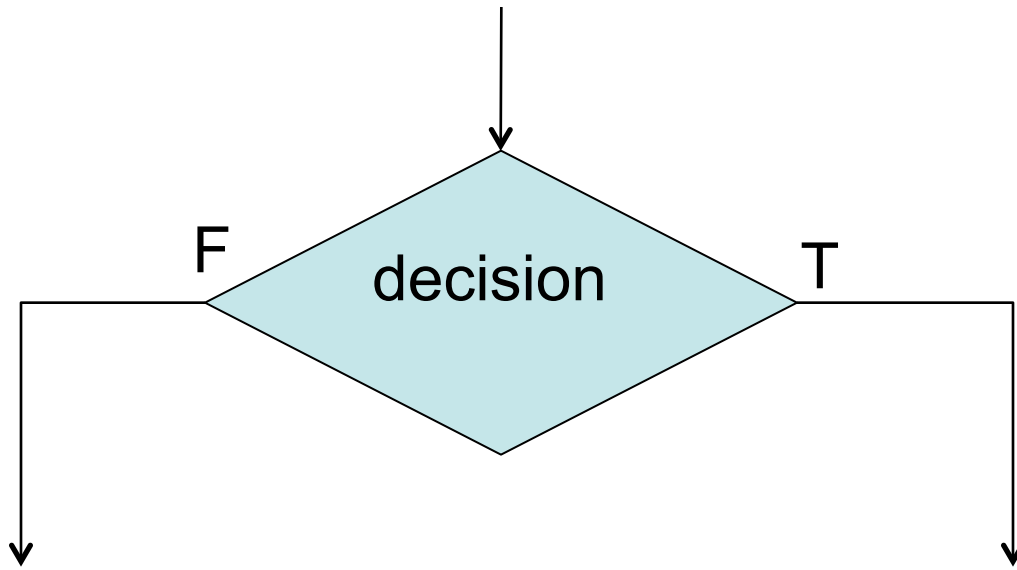
```
print "Welcome to System Security Inc."
print "-- where security is our middle name\n"

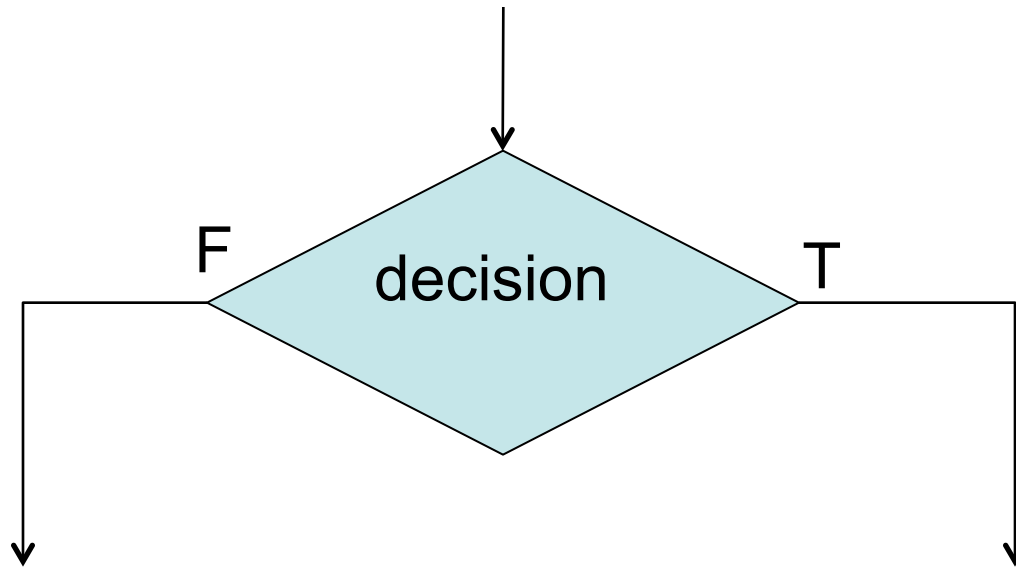
password = raw_input("Enter your password: ")

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

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







```
if <proposition> :  
    <statement>  
    <statement> (optional)  
else:  
    <statement>  
    <statement> (optional)  
<other statements>
```

Propositions in Python

5 == 5

equal

8 != 5

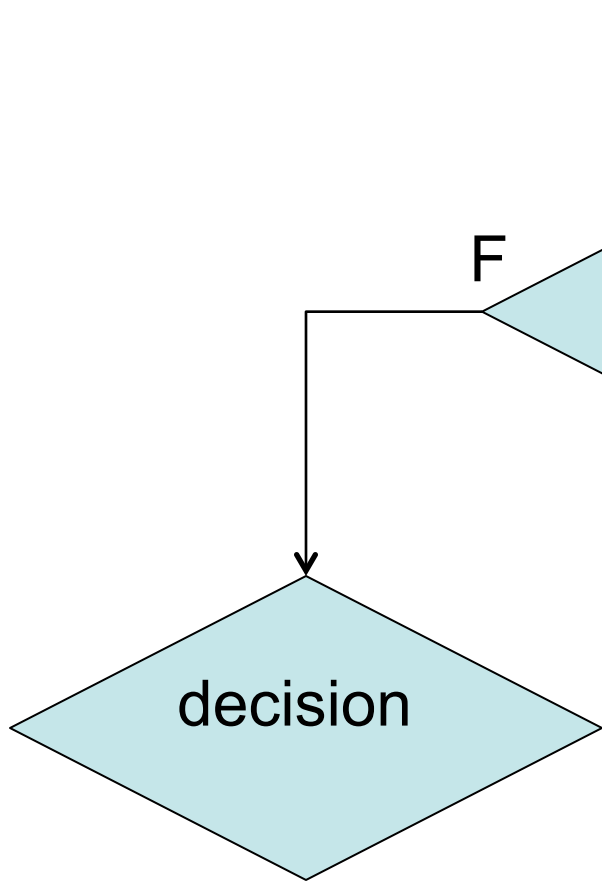
not equal

3 > 10

5 < 8

5 >= 10

5 <= 5



if <proposition> :
 <statement>
 <statement> (optional)
elseif <proposition>:
 <statement>
 <statement> (optional)
...
else:
 <statement>
 <statement> (optional)
<other statements>

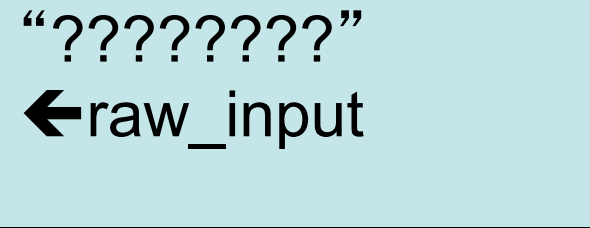
```
# Three Year-Old Simulator
# Demonstrates the while loop

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"

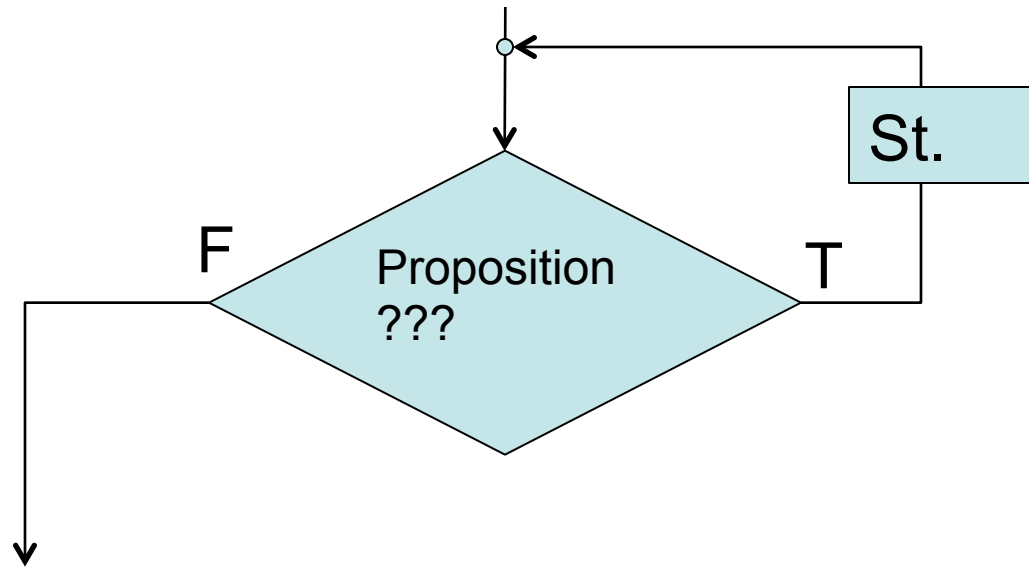
response = ""
while response != "Because.":
    response = raw_input("Why?\n")

print "Oh.  Okay."

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



“????????”
←raw_input



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 = raw_input("Enter your password: ")

If ...
print "Access Granted"

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

Modify this program to give more chances..

• P1	P2	&	
• T	T	T	T
• T	F	F	T
• F	T	F	T
• F	F	F	F

```
# Password
# Demonstrates the if structure
print "Welcome to System Security Inc."
print "-- where security is our middle name\n"

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

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

raw_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\n"

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

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

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

```
print "\tExclusive Computer Network"
print "\t\tMembers only!\n"

security = 0

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

password = ""
while not password:
    password = raw_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

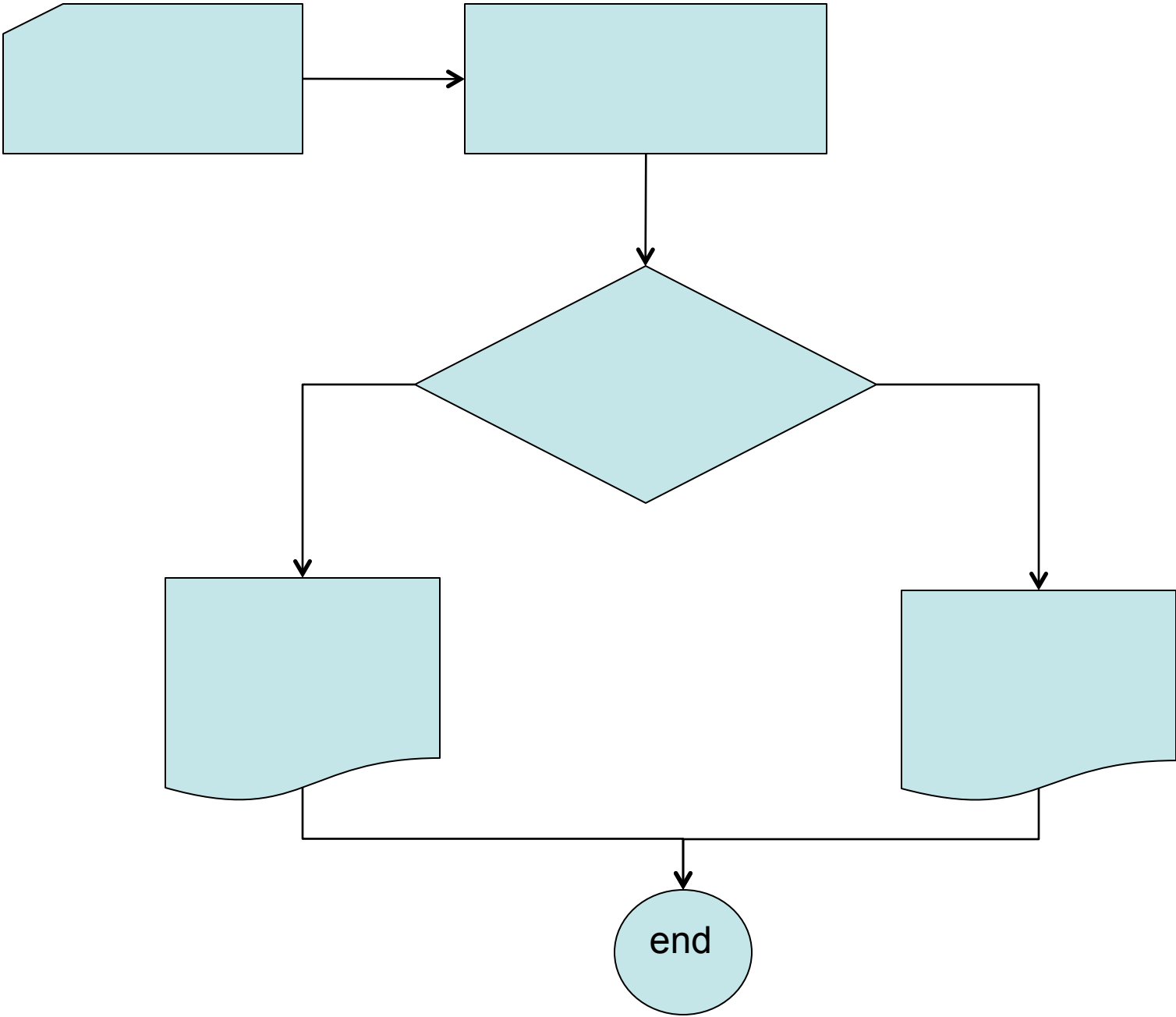
print "Counting:"
i = 10
While i > 0:
    print i,
    i = i - 1

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

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

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

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

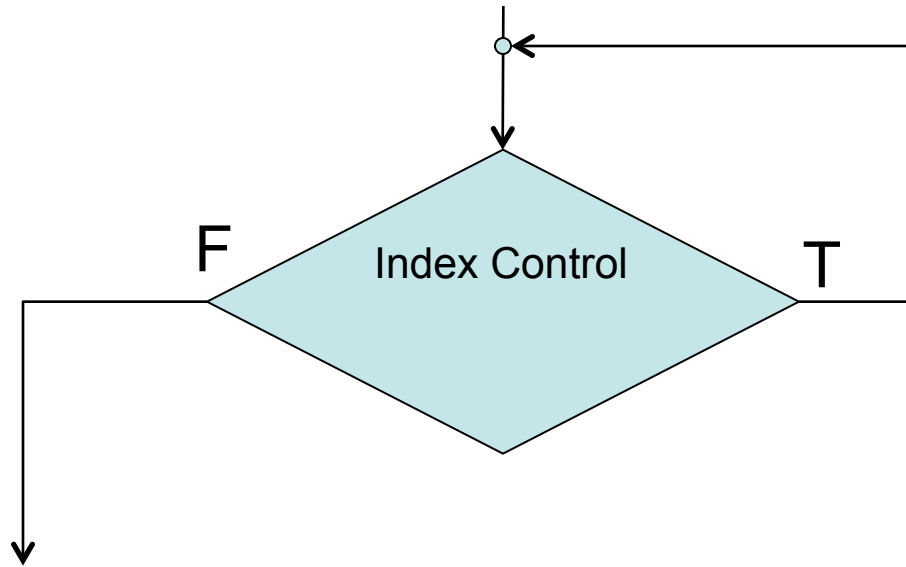



```
# Loopy String
# Demonstrates the for loop with a string

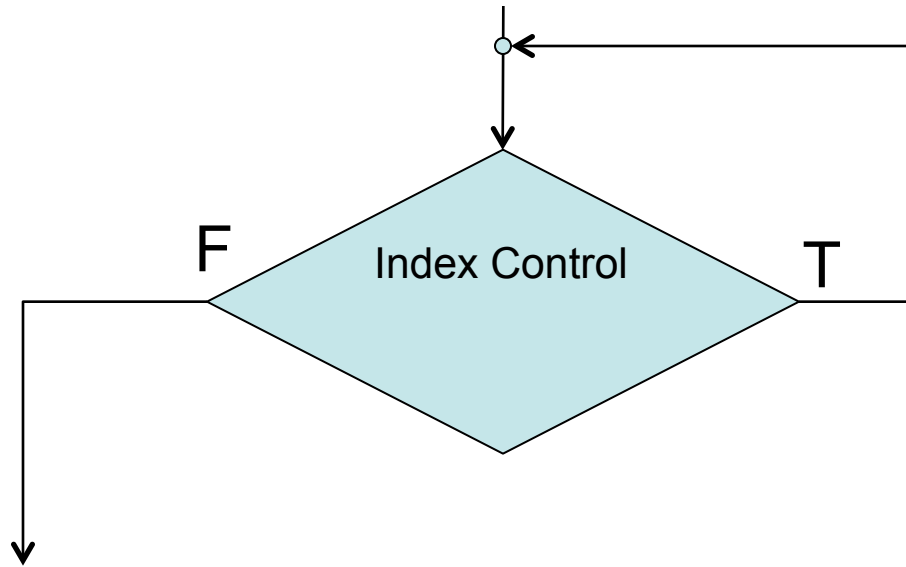
word = raw_input("Enter a word: ")

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

raw_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
```

Use For Loop!!!

```
print "Welcome to System Security Inc."
```

```
print "-- where security is our middle name\n"
```

```
password = raw_input("Enter your password: ")
```

```
numberOfTry = 1;
```

```
while (password.lower() != "secret") & (numberOfTry < 3):
```

```
    print "Access Denied -- tried ", numberOfTry, " times."
```

```
    password = raw_input("Enter your password: ")
```

```
    numberOfTry = numberOfTry + 1;
```

```
    if (pass... == "secret"):
```

```
        break
```

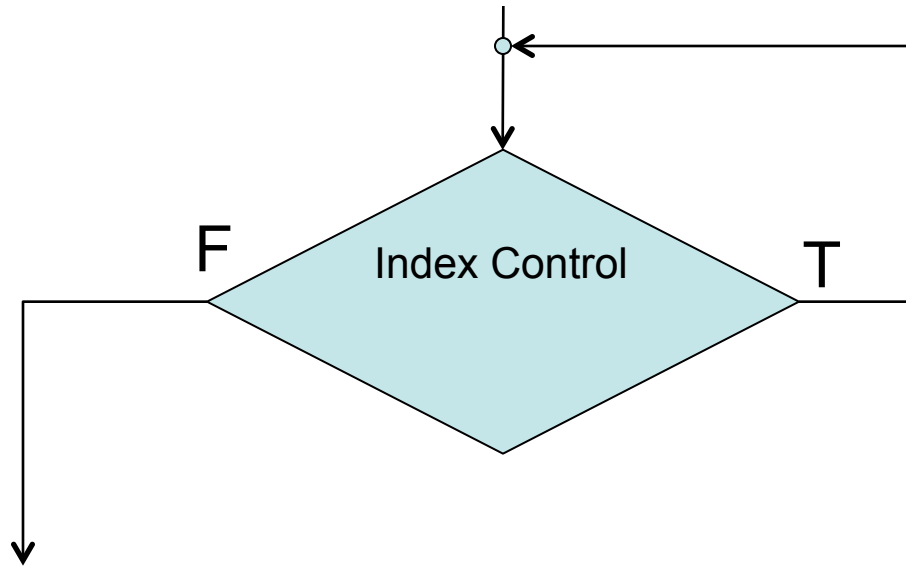
```
if password.lower() != "secret":
```

```
    print "Access Denied after ", numberOfTry, " times."
```

```
else:
```

```
    print "Access Granted"
```

```
raw_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\n"

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

raw_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]

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


0	1	2	3	4
P	i	z	z	a
-5	-4	-3	-2	-1

```
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 = (raw_input("\nBegin: "))

    if begin:
        begin = int(begin)

        end = int(raw_input("End: "))

        print "word[" + begin + ":", end + "]\t\t",
        print word[begin:end]

raw_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()
```