

Int Div / Mod67 inches $\Rightarrow$

$$67 // 12 = 5 \text{ feet}$$

$$67 \% 12 = 7 \text{ inches}$$

170 minutes $\Rightarrow$

$$170 // 60 = 2 \text{ hr}$$

$$170 \% 60 = 50 \text{ min}$$

78 $\Rightarrow$

$$78 // 10 = 7 \text{ tens digit}$$

$$78 \% 10 = 8 \text{ ones/units digit}$$

1283 pennies $\Rightarrow$

$$1283 // 100 = 12 \text{ dollars}$$

$$1283 \% 100 = 83 \text{ cents}$$

Random Numbers

Pseudo-random

Import

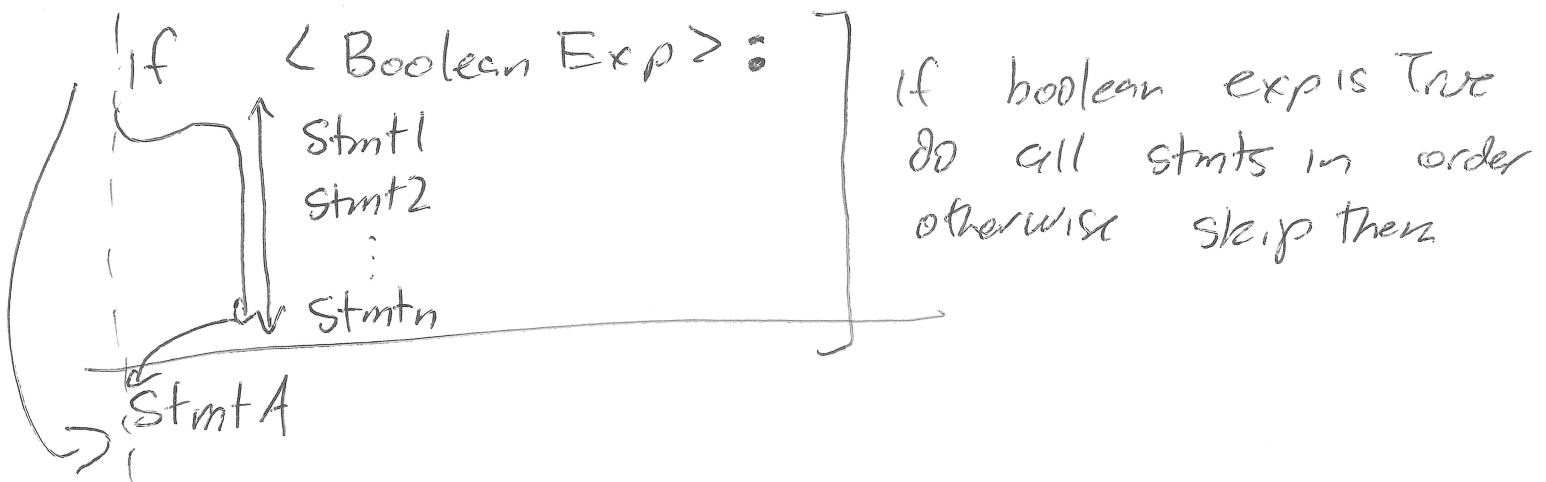
import random

$\swarrow$ function/method
 $\swarrow$ low bound
 $\swarrow$ high bound
 die1 = random.randint(1, 6)

If Statement

If sunny: ^{homework done}
go to beach

If rich:
go to concert! ^{either true or false (True, False)}



Most Simple Boolean Expressions

$a > b$
 $a < b$ } a, b are arithmetic expressions

$a == b$ } checks for equality

$a >= b$
 $a <= b$ } note we can use this for strings

$a != b$ } not equal

More complicated

and } Boolean operators
or }
Check if teenager
if age ≥ 13 and age ≤ 19 :
both have to be true

if gpa ≥ 3.5 or sat ≥ 1300 :
at least 1 has to be true

if-else

if $\langle \text{Boolean exp} \rangle$:

stmts A

else:

stmts B

stmt C

if true
stmts A
stmt C

if false
stmts B
stmt C

Last version of if

if < Boolexp1 > :

stmts A

elif * < Boolexp2 > :

stmts B

elif < Boolexp3 > :

stmts C

as many
elif branches
as you
want

Optional

else :

stmtX

1st boolean exp
that is true has its
stmts executed.
Then skip to stmtX
if none are true,
do the else stmts