

Introduction to Computer Programming

1.3 Operators



In-class Demos

Example 1:

Write a program that:

1. creates 3 variables, A , B and C , with numerical values
2. outputs a statement that tells the user if the values include *any* negative numbers.

In [12]:

```
A, B, C = 1, 1, 2  
answer = A < 0 or B < 0 or C < 0  
print('any negatives?', answer)
```

any negatives? False

Example 2:

Write a program that answers *two* questions based on the current time of day:

Is it lunchtime?

True if time between lunch start and end times.
False if not.

Is it time for work?

True if time between work start and end times **and not** lunchtime.
False if not.

In [14]:

```
t = 13.45 # current time
Ls = 13.00
Le = 14.00
Ws = 8.00
We = 17.00

lunchtime = Ls <= t < Le

# work_time = Ws <= t < We and not Lunchtime
work_time = not (t < Ws or t >= We or lunchtime)

print('work time?', work_time)

print('lunchtime?', lunchtime)
```

```
work time? False
lunchtime? True
```