Creative Computing

Types, user input, conditionals

Types

- Variables have types
- We talked about integer division
- Use function type(<variable>) to find out a variable's type

```
>>> income = 90000
>>> type(income)
<type 'int'>
```

Types

- int - whole numbers
- float - decimals
- str - string (multiple characters)

Printing numbers

- Can't squish together numbers and strings
- Need to use str() function

```
>>> print("income: " + str(income))
income: 90000
```

User input

- Interactive programs are more fun
- Use the raw_input() function
- Result is a string
- We generally print a message first

```
>>> print("What is your income?")
>>> income = raw_input()
80000
>>> print(income)
80000
```

Math on input

- Careful -- the result is a string!
- We have to use the int() function

```
>>> taxed = .20 * int(income)
>>> print(taxed)
16000.0
```

Conditionals

- Programs need flexibility to run differently
- React to user input

```
if(income > 50000):
    print("You're rich!")
else:
    print(" Ask for a raise ")
```

Comparisons

- == equals
- < less than
- > greater than
- <= less than or equal
- >= greater than or equal
- or, and let us join conditions together