CS 160
CS Orientation
Loops and Built-in Functions...
In-class Exercise #3...

- For all the employees in our company, calculate their gross pay based on their hours and pay rate.
- What if you want to make sure they provide a valid integer for number of employees?
- How does this differ from hours and pay rate?
Make sure it is a valid int
(continue to work on this...)

```python
num_emp = input("enter num employees: ");
all characters in string must be 0-9 digits to be positive int
for x in range(len(num_emp)):
    print(num_emp[x]);
# change to int, when you know it is valid
num_emp = int(num_emp);
for x in range(num_emp):
    hours = float(input("Employee #" + str(x+1) + " enter hour: "));
    pay = float(input("enter pay: "));
    gross = hours * pay;
    print(gross);
```

Don't change to an integer until we know it's valid.
we need to do this only if it's valid.

OO languages do allow for the error to happen catch it when it happens.

we are catching before it happens.
6 more lines: before #1 71 seconds ago
Look into Chap. 2 and 4 of Python docs
What if we don’t have an isnumeric()?

```python
num_emp = input("enter num employees: ");
error = False;  # we assume we don't have an error
# all characters in string must be 0-9 digits to be positive int
for x in range(len(num_emp)):
    if num_emp[x] < '0' or num_emp[x] > '9':
        print("You idiot! I said integer number!!");
        break;  # we found an error!
    length of a string

if (error == False):
    # if there wasn't an error, then valid
    # change to int, when you know it is valid
    num_emp = int(num_emp);
    for x in range(num_emp):
        hours = float(input("Employee "+str(x+1)+" enter hour: "));
        pay = float(input("enter pay: "));
        gross = hours * pay;
        print(gross);
```

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