CS 160
CS Orientation

Functions
Odds and Ends...

• Assignment #6: keep working and ask questions!!!
• EECS Networking night tonight, 5-8pm (KEC)
• Career Fair Thursday 11am-3pm, CH2M Hill Alumni Center
```python
# Function definition

```
Defining functions and main()

```python
i=20; #global space, anyone can access Don't do this!!!
#Name: f
#Description: take a base to a power of 2
#Parameters: x is the base for the exponent
#Preconditions: x is a good unsigned int
#Postconditions: none
#Return: result is the base to the power of 2

def f(x):
    i=200; #creates a local i, which overrides the global i
    print(i); #print local i
    result=x**2; #create local variable
    x=500; #we can change parameter but doesn't change argument in main
    print("X in fun: " + str(x));
    return result; #return from function with a value

def main():
    x=int(input("Enter an int: "));
    print(f(x)); #you can print the value of result returned from f(x)
    print("X: " + str(x)); #lets see if argument changed in f

main(); # call main in global area
print(i); #does the global i change when there is a local i in f
```
As a class, let’s define functions...

• For all the employees in our company, calculate their gross pay based on their hours and pay rate.

• Create a function to get number of employees.
• What if you want to make sure this function only returns a valid integer?
• Create function called gross_pay that takes the number of employees and calculates gross pay for each.
• Create a main function where the program begins.