# Recitation 2

# Homework 1 (Due Feb 11th, 8:00pm)

- 8 Tasks to implement
- 5.0%  of total grade
- 100% Deductions can be incurred if:
    - A GUI is created
    - Built in java methods for certain operations are used.
        - EX:  Integer.parseInt(num, radix);
        - EX:  Integer.valueOf(string);
        - EX:  Integer.valueOf(string, radix);
        - Or any of the Long versions!

# Homework 1

- Task 1: Check to see if number of arguments is correct. If not, print error and terminate program.
- Task 2: Determine the numbering system corresponding to input.
  Ex: 0b10101 ⇒ Binary
- Task 3: Error checking - Check to see if the characters in input are correct.
  - 0xFFFF=true
  - 0xPIZZA=false

# Homework 1

- Task 4: Convert inputs into other bases. Ex: Hex input ⇒ Decimal and Binary
- Task 5: Convert inputs into 1's complement
- Task 6: Convert inputs into 2's complement
- Task 7: Compute the bitwise OR, AND, and XOR of the 3 inputs.
- Task 8: Compute the bitwise left and right shift of the 3 numbers for 2 shifts.

# Homework 1

- How to submit:
    - Submit .zip file to canvas
        - Ex: <FirstName>-<LastName>-HW1.zip

 - All classes must be in package called package cs250.hw1

 - Will be graded based on comparing our output to yours - see examples in Homework 1 instructions.

# Signed Representations of Numbers

- 1's Complement: Flip all of the bits
- 2's Complement: Flip all of the bits + 1
- Performing calculations in these different formats: Addition, subtraction, etc…

# Recitation 2 Mock Submission (Due Jan 28 8PM)

- Upload a skeleton of HW1 to canvas
- Should be in the same format as your submission for HW1 (look at Homework 1 instructions)
- After running command:  java cs250.hw1.Operations
    - Expected output:  Hello World!
- REMOVE print statement before your final submission for HW1