

Lecture #3 Notes – Python (based on Video) Name \_\_\_\_\_

1) A Boolean expression is either True or False

2) Type(True) = Bool

a. Boolean expressions are not STRINGS

3) List the comparison operators:

a.  $x \neq y$  # x is not equal to y

b.  $x > y$  # x is greater than y

c.  $x < y$  # x is less than y

d.  $x \geq y$  # x is greater than or equal to y

e.  $x \leq y$  # x is less than or equal to y

f.  $x \text{ is } y$  # x is the same as y

g.  $x \text{ is not } y$  # x is not the same as y

4) = is an ASSIGNMENT OPERATOR

5) == is an COMPARISON OPERATOR

6) The three logical operators are AND NOT & OR

7) Note for later – 0 is False but any non-zero number is True

8) Write this Program:

```
x=input('type in a number')
```

```
if int(x) > 0:
```

```
    print ('x is positive')
```

```
else:
```

```
    print('x is not positive')
```

9)  $n\%2 == 0$  or  $n\%3 == 0$  is true if ) either n is dividisible by 2 or 3

10)The boolean expression after the `if` statement is called the condition

11) There is no limit on the number of statements that can appear in the body, but there must be at least one. Occasionally, it is useful to have a body with no statements (usually as a placekeeper for code you haven't written yet). In that case, you can use the pass statement, which does nothing.

12) A second form of the if statement is alternative execution, in which there are two possibilities and the condition determines which one gets executed. The syntax looks like this: DO THIS

```
x=input('input and integer')
x=int(x)
if x%2 == 0:
    print('x is even')
else :
    print('x is odd')
```

13) Chained conditionals – DO THIS

```
x=input('input a number x')
y=input('input a number y')
x=float(x)
y=float(y)
if x < y:
    print('x is less than y')
elif x > y:
    print('x is greater than y')
else:
    print('x and y are equal')
```

14)

```
inp = input('Enter Fahrenheit Temperature:')
```

```
try:
```

```
    fahr = float(inp)
```

```
    cel = (fahr - 32.0) * 5.0 / 9.0
```

```
    print ('celcius temperature is',round(cel,2))
```

```
except:
```

```
    print ('Please enter a number')
```

Read Section 3.7 Catching exceptions using try and except

Score : \_\_\_\_ / 15 Answers

\_\_\_\_ / 10 Participation / Attitude