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Notebook:	Computers and Programming I		
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AND Truth Table

A	B	A and B
T	T	T
T	F	F
F	T	F
F	F	F

OR Truth Table

A	B	A or B
T	T	T
T	F	T
F	T	T
F	F	F

- Both tables above are binary operators
    - And
    - Or
        - connects two Boolean expressions
- Unary Operator
    - Not
- The And Operator
    - Creates compound Boolean expression that is true only when both sub expressions are true
    - Can be used to simplify nested decision structure
- The Or Operator
    - Creates compounds Boolean expression that is true when either of the sub expressions is true
    - Can be used to simplify nested decision structures.
- Short Circuit Evaluation
    - Deciding the value of a compound Boolean expression after evaluating only one sub expression
        - Performed by the or and "and operators
            - For or operators: If the left operand is true, the compound expression is true. Otherwise, evaluate right operand.
            - For and operator: If left operand is false, compound expression is false. Otherwise, evaluate right operand.
- The Not Operator
    - Takes one Boolean expressions as operand and reverses its logical value
        - Sometimes it may be necessary to place parentheses around an expression to clarify to what you are applying the not operator.
        - The Truth Table For Not Operator

Expression	Value of Expression
True	False
False	True

- Write a program that converts Celsius temperatures to Fahrenheit temperatures using the following formulas:
- F = 9/5c + 32
- The program should ask the user to enter a temperature in Celsius and then display the temperature in Fahrenheit
- The program should ask the user to enter a temperature in Celsius and then display the temperature in Fahrenheit
- ```
  temp1 = float(input("Please enter temperature in degress Celcius:"))
  conversion = (9/5)*temp1+32
  print ("You temperatue in Fahrenheit is", conversion)
  ```

- A car's miles per gallon (MPG) can be calculated with the following formula:
  - MPG = miles driven / gallons of gas used.
  - Write a program that prompts the user to enter the number of miles driven and the gallons of gas used.
  - It should calculate the car's MPG and display the result.
  - ```
    miles_driven= float(input("Please enter the amount of miles you have driven:"))
    gas_used= float(input("How much gas have you used in gallons?"))
    MPG = (miles_driven/gas_used)

    print ("You are using", MPG, "miles per gallon")
    ```
- On homework, always include the following:
  - #Name
  - #CS101_04
  - #Homework Number