**In class assignments:**

1. Write a python program to input temperature in Celsius scale and convert it to Fahrenheit scale

*T*(°F) = *T*(°C) × 1.8 + 32

*Allow user to enter temp in Far/Cel and conver to the other and display.*

2. Write a python program to input mass and acceleration and compute Force

F=M\*A

3. Write a program to prompt the user for hours and rate per hour to compute gross pay.

4. Write a program to pay 1.5 times the hourly rate for the hours worked above 40 hours else pay based on hourly pay and hours worked input hourly rate and hours worked and display pay

5. Rewrite your pay program using try and except so that your program handles non numeric input gracefully by printing a message and exiting the program.

The following shows two executions of the program:

Enter Hours: 20, Enter Rate: nine

Error, please enter numeric input

6. Write a program to prompt for a score between 0.0 and 1.0. If the score is out of range, print an error message.

If the score is between 0.0 and 1.0, print a grade using the following table:

Score Grade

>= 0.9 A

>= 0.8 B

>= 0.7 C

>= 0.6 D

< 0.6 F

print 'Bad score' if the score is not between 0.0 and 1.0 or if the score is not numeric value entered

7. Input 3 numbers, Write a program to find the largest of 3 numbers

**Post class assignments:**

Use Conditional constructs only

1. Write a program to input 5 numbers and Find the average of 5 numbers
2. Write a program to input 5 numbers and print numbers which are above the average
3. Write a program to input 5 numbers and print even numbers
4. Write a program to input 5 numbers and multiple even number by 3 and odd numbers by 5
5. Write a program to input 15 numbers:
   1. Find the average
   2. Standard deviation
   3. Variance
   4. Median
   5. Check if any of the numbers are > or < (2 \* sd) from the mean and print those numbers

Every input should be a valid number in the range > 0 and < 9999

1. Write a program to implement a calculator:
   1. Input 2 values and an operation to be performed
   2. Valid entries for operations is:
      1. + (if both values are numbers are numeric add else concatenate)
      2. –
      3. \* (if both are numeric multiply, if one of them is numeric and other a character replicate the character
      4. /
      5. //
      6. \*\*