Lesson 8a: Break

The break statement exits out of a loop.

For example:

x=0

while (True):

  if x == 5:

    break

  else:

    x=x+1

    print(x)

This will print x=1 till 5

Lesson 8b: or

```python
if (y == x) or (y == -x):

    print("Could be the absolute value function")
```

Lesson 8c: and

```
if (teacher_last_name == "Gardner" and teacher_first_name == "Markis"):

    print("You have a great teacher!")
```

Lesson 8d: Continue

The continue statement stops but then goes to the loop again

For example:

```
x=0

while (x<10):

   x=x+1

   if x == 5:

      continue

   else:

      print(x)
```

This will print x=1 till 10 but skip 5

Homework for Lesson 8

Do the following using Python 3

1) Print the numbers 1 to 100 except for any number with a 4 in it.
2) Ask the user for the total bill, the amount paid then you tell the change in as few
   bills/coins as possible. Example: Total was $10.59 and you paid with $100.00.
   1 $50 bill
   1 $20 bill
   1 $10 bill
   1 $5 bill
   4 $1 bills
   1 25 cent coin (or quarter)
   1 10 cent coin (or dime)
   1 5 cent coin (or nickel)
   1 1 cent coin (or penny)
   Note: You can use $2 bills if you want. They are legal currency but most stores don't
   have them. You can use 50 cent pieces if you want also – again most stores don't have
   them. If no change then say "No Change". If not enough money – they say how much
   more is needed.
3) Print the following using a while loop and number entered from user….
   ```
      *
     * *
   *****
   ```
   If user entered 3
4) Print the following using a while loop and number entered from user…

   ```
        *
       * *
      *   *
       * *
        *
   ```
   If user entered 3
5) Enter in 2 different times and tell the number of seconds difference (make sure answer
   is positive).
6) Find the factors of a number
7) Find the GCF of 2 numbers
8) Find the LCM of 2 numbers
9) Write out the number (less than 1000) in expanded form – example 892 = 800 + 90 + 2