Python

string + string	combine together
string + number	crash
number + number	math-addition
number-number	math-subtraction
number*number	math-multiplication
number/number	math-division
number**number	math-exponent
number%number	finding a remainder
bolean	True/False
#	single-line comment
"""	multi-line comment

Countdown

```
while True:
user_number = input(" Enter ur number
Here...")
number = int(user_number)
countdown_string = ""
while number > 0:
countdown_string = countdown_string +
str(number)
number = number - 1
print (countdown_string)
```

Letter

```
name = "tim GIRARD"
print (name. upper())
print (name. lower())
print (name. capitalize())
print (name. title())
TIM GIRARD
tim girard
Tim girard
Tim Girard
```

For Loop and List

```
shoppinglist = ['salmon', 'bacon', 'water', 'jelly',
'ham']
print (shoppinglist)
list_num = 0
while list_num < len(shoppinglist):
```

For Loop and List (cont)

```
print ("List:",shoppinglist[list_num])
list_num = list_num + 1
for item in shoppinglist:
print (item)
numbers = range(120)
for num in numbers:
print (num)
```

Vocabulary

str	string
int	integer
float	decimal number
syntax	the structure of a program
syntax error	An error in a program that makes it impossible to parse
len	Return the length of an object
Modulus(%)	Show the remainder of the division
Single Equal (=)	assigns the value on the right to a variable on the left
Double Equal (==)	test if the 2 value are the same
String	a series of sentences that the user will use. Usually surrounded by double quotes
Variable	A thing that can be changed
input	convert things you enter

List

```
import random
intlist = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12]
random_int = random.choice (intlist)
print(intlist,random_int)
fplist = [0.1, 0.2, 0.3, 0.4, 0.5, 0.6]
random_fp = random.choice (fplist)
print (fplist,random_fp)
strlist = ["1","2","3","4","5","6","7","8","9"]
```

List (cont)

```
random_str = random.choice (strlist)
print (strlist,random_str)
mylist =
["adam","mild","loveadam","levine","3","4.6",424,
674,5.733]
random_item = random.choice (mylist)
print (mylist,random_item)
myvar1 = 1
myvar2 = 2
myvar3 = 3
varlist = (myvar1,myvar2,myvar3)
random_var = random.choice (varlist)
print (varlist,random_var)
```

List

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intlist = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12]
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print(intlist,random_int)
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print (mylist,random_item)
myvar1 = 1
myvar2 = 2
myvar3 = 3
varlist = (myvar1,myvar2,myvar3)
random_var = random.choice (varlist)
print (varlist,random_var)
```

Symbol

if/elif/else	conditionals
While	loop
for	list all the thing
!=	If values of two operands are not equal, then condition becomes true.
==	test if the 2 value are the same
<	less than
<=	If the value of left operand is less than or equal to the value of right operand, then condition becomes true.
>	greater than
>=	If the value of left operand is greater than or equal to the value of right operand, then condition becomes true.

Guess word game

```
import random

#create a list

guesslist = ['adam', 'mild', 'levine']

chance = 3

score = 0

print (guesslist)

while chance != 0:

random_item = random.choice(guesslist)

user_input = input("please guess a word: ")

if user_input == random_item:

print (that's correct!")

else:

if user_input not in guesslist:

print ("sorry, that's wrong")
```

List

```
import random
intlist = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12]
random_int = random.choice (intlist)
print(intlist,random_int)
fplist = [0.1, 0.2, 0.3, 0.4, 0.5, 0.6]
random_fp = random.choice (fplist)
print (fplist,random_fp)
strlist = ["1","2","3","4","5","6","7","8","9"]
random_str = random.choice (strlist)
print (strlist,random_str)
mylist =
["adam","mild","loveadam","levine","3","4.6",424,
674,5.733]
random_item = random.choice (mylist)
print (mylist,random_item)
myvar1 = 1
myvar2 = 2
myvar3 = 3
varlist = (myvar1,myvar2,myvar3)
random_var = random.choice (varlist)
print (varlist,random_var)
```

Math - circle

```
while True:
pi = 3.1415
user_radius = input( " Insert radius here... " )
radius = float(user_radius)
area = pi radius*2
print ( " the area of the circle is",area)
print ( " Allahu Akbar")
```