

Function

int()	Change number to be number integer
float()	Change number to be decimal number
str()	A list of number, letter and symbols
print()	Show information that you want on the screen
len()	The length of the string
#	Comment, no effect
import random + random.choice	pick random item in the list

Reverse Word

```
while True:
    word = input("Please enter a word")
    index = 0
    reverse = ''
    while int(index) < len(word):
        reverse = word[index] + (reverse)
        index = int(index) + 1
    print ("Reverse: ", reverse)
```

Sort word per line

```
mystr = "Hello"
letter_num = 0
while letter_num < len(mystr):
    print (mystr[letter_num])
    letter_num = letter_num + 1
```

H
e
l
l
o

Circle area

```
"""
Python Intro Assignment #2
name
student number
"""
#Ask the user for a radius of a circle
user_radius = input("What is a radius of a circle?")
#Convert the given radius to a floating point
radius = float(user_radius)
#Make a variable called pi
pi = float(3.1415)
#Calculate the area of the circle using exponents
area = pi(radius*2)
#Display the area of the circle to the user
print ("The area of the circle is", area)
```

Addition

string + string	Combine together
string + number	Crash
number + number	Math - addition

Multiplication and Exponents

string * number	Combine that string
string * string	Crash
number * number	Math - multiply
string ** string	Crash
number ** number	Math - exponent
string ** number	Crash

Convert to Binary

```
user_number = ''
while user_number != '0':
    user_number = input("Enter a number to convert to binary")
    number = int(user_number)
    binary_string = ''
    while (number > 0):
        remainder = number%2
        binary_string = str(remainder)+ binary_string
        number = number//2
    print ("Binary string is",binary_string)
```

Decimal to Binary

```
user_number = ''
while user_number != '0':
    user_number = input("Enter a number to convert to binary")
    number = int(float(user_number))
    binary_string = "
```

```
while (number > 0):
    remainder = number%2
    binary_string = str(remainder)+ binary_string
    number = number//2
print ("Binary string is",binary_string)
```

Print name

```
name = "jirat PRASERTMAK"
print (name.upper()) ----->
JIRAT PRASERTMAK
print (name.lower()) ----->
jirat prasertmak
print (name.capitalize()) ----->
---> Jirat prasertmak
print (name.title()) ----->
Jirat Prasertmak
```

Math

==	equal to
!=	no equal to
<	less than
>	more than
<=	less than or equal
>=	more than or equal
%	Modulo, find the remainder

Vocabulary

variable	Hold a value and can be changed
syntax	Grammar or structure of language
modulo	Find the remainder
boolean	True or false
floating point	The number in decimal

Countdown Machine

```
user_number = input("What number do
you want to count down? ")
number = int(user_name)
countdown_string = ''
while number > 0:
    countdown_number =
countdown_string + str(number) + "
"
    number = number - 1
    #print(number)
print (countdown_string)
```

Guess word game

```
import random
#Create a list
guesslist = ['vesicle',
'lysosome', 'chloroplast',
'ribosome', 'vacuole']
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!")
        score = score + 100
        print ("Score:", score)
    else:
        if user_input not in
guesslist:
            print ("Sorry, that
isn't even in the list!")
            chance = chance - 1
            print ("Chance
Remaining:", chance)
        else:
            print ("Sorry, wrong
choice!")
            chance = chance - 1
            print ("Chance
Remaining:", chance)
if chance == 0:
    print ("The word was",
random_item)
    print ("The score is", score)
```

