

### Terms/Functions or Definition

Int (Integers)	A thing complete in itself
Variable	Something that can be change
Elif	Else/If
Float	Number including all the decimals
mynum%2	What is the remainder when dividing by 2
**	Square (the number)
==	Equal to...
!=	NOT equal to...
Decimals in Python...	Any decimal in python, it will get rid of all except for the 'floats' command
" "	Anything puts under the quotes, will turn into 'INTEGERS'
len	length (e.g. length of words)
str	String
String	text you want to display to someone, or "export" out of the program you are writing
List	Contains many words
Input	Allow the user to type in/input something
#	Comments only (it does not interfered or have any affect with the commands in the programs)

### Area of Circle

```

"""
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)

```

### Covert Decimal 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)

```

### 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

### Vocabulary

String	A list of character such as number, letter and symbols ("Under quotes")
Variable	Hold a value and can be change
Integer	Whole number (Can be positive or negative)
Number	
Floating Point	The number with decimals
Syntax	Grammar/Structure of Language
Modulo	Find the remainder
Boolean	True/False

### Countdown Machine

```

user_number = input("What number do you want to count down? ")
number = int(user_number)
countdown_string = ' '

while number > 0:
countdown_number = countdown_string + str(number) + " "
number = number - 1
#print(number)

print (countdown_string)

```