

Function

print()	show information that you want on the screen
int()	change number to be number integer
float()	change number to be decimal
input()	gain information from user
str()	a list of number, letter and symbols
len()	the length of the string
#	comment, no effect

vocabulary

variable	hold a value and can be change
string	a list of character such as number, letter and symbols
Integer number	whole number/ counting number
float number	the number in decimal
syntax	grammar/structure of lanquage
modulo	find the remainder
boolean	true/false

Math

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

addition

string + string	combine togethe
string + number	CRASH!
number + number	additional (math)

multiplication and exponents

string * number	combine that string
string * string	CRASH!
number * number	multiply (math)
string ** string	CRASH!
number ** number	Exponent (math)
string ** number	CRASH!

naming convention

Rule for giving name

-letter
-number
-underscore(_)
valid name
-mystr
-my3
-hello_there
invalid name
-3my="hi" --cannot start with number
-first name="hi"
-first-name

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)
```

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)
```