

### Function

print()	Show information that you want on the screen
int()	Change number to be number integer
float()	Change number to be decimal number
input()	Gain information from user
str()	A list of number, letter and symbols
len()	The length of the string
#	Comment, no effect

### Addition

string + string	Combine together
string + number	CRASH!
number + number	Addition (Math)

### Function- maxvalue

```
# name: max2
# arguments: num1, num2
# return: the largest value
def max2(num1, num2):
    maxvalue = num1
    if num2 > num1:
        maxvalue = num2
    return maxvalue

print(max2(10, 9))
print(max2(1, 9))

# write a function that returns the
largest of three values
# name: max3
# arguments: num1, num2, num3
# return: the largest value
def max3(num1, num2, num3):
    maxvalue = num1
    if num2 > maxvalue:
        maxvalue = num2
    if num3 > maxvalue:
        maxvalue = num3
    return maxvalue

print(max3(2, 12, 4))
print(max3(19, 9, 17))
```

### Function- maxvalue (cont)

```
# write a function that returns the
largest number in a list
# name: maxlist
# arguments: list
# return the largest value in the
list
def maxlist(list):
    # loop through the list
    return maxvalue

numlist = (1, 2, 3, 4, 5, 99)
print(maxlist(numlist))
```

### 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
Floating point	The number in decimal
Syntax	Grammar/Structure of language
Modulo	Find the remainder
Boolean	True/False

### 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!

### Math

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

### 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

```
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)
```

