

## Addition

string+string	combine together
string+number	crash
number+number	math-addition

## Multiple action and Exponents

string*number	combine that string multiple times
string*string	crash
number*number	math-multiply
string**string	crash
number**number	math-exponents
string**number	crash

## Math

==	equal to
!=	no equal to
<	less than
>	more than
<=	less than or equal to
>=	more than or equal to

## Vocabulary

Variable	holds a value and can be changed
string	a list of characters such as numbers, letter,symbols

## Vocabulary (cont)

syntax	grammars or structure of language
float	the number in decimal
number	
input	gain information from user
print	to show information on the screen
syntax error	make impossible to the parse error
mudole	the text for storing for python code
integer number	whole number or counting number
value	the number or string can be store in valuable

## Function that allow a user to create a list

```
#create a function that allow a
user to create a list
#function name: createList
#parameter: word
#returns the list
def createList(quitword):
    mylist = [] # create an empty
list
    while True:
        #get the item from the user
        item = input('Please enter
a list item: ')
        #when the user enters an
item that is equal to quitword
        if (item == quitword)
            return mylist # return the
list
```

## Function that allow a user to create a list (cont)

```
#check if the list already
has that word
duplicateword = False
# figure out of the word is
already in the list
For myvar in mylist:
    if myvar == item:
        duplicaeword = True
#..... loop through the
list and compare each value
if duplicateword == True:
#duplicate is true
    print ('Duplicate
word!')
else:
    #add this item to the
end of the list
    mylist.append(item)
#function call
mylist = createList("stop")
print(mylist)
```

## Function

print()	displays information on the screen
input()	receives information from the user
int()	convert a value to an integer
float()	decimal number
str()	string(word) " "
#	comment(one line)
" "	comment(many lines)



### code

```
# receive the number from the user
as a string
user_number = input("enter number:
")
#convert the user number to an
integer
number = int(user_number)
#setup the countdown string
countdown_string = ''
while number > 0:
    countdown_string =
countdown_string + str(number) + "
"
    number = number - 1
print (countdown_string)
#get a number from the user
user_number = input("Please enter a
number: ")
#convert to integer
number = int(user_number)
binary_string = ''
while (number > 0):#the number is
greater than 0)
    remainder = number % 2
    binary_string = binary_string +
str(remainder)
    number = number // 2
    #print (number)
#after the loop print the binary
string
print ("Binary string is",
binary_string)
#expected output - 5 = 101
#expected output - 3 = 11
#expected output - 2 = 10
word = input("Please enter a word:
")
index = 0
reverse = ''
while int(index) < len (word):
```

### code (cont)

```
    reverse = word [index]+
(reverse)
    index = int (index) +1
print ("Reverse: ",reverse)
import random
intlist = [1,2,3,4]
random_int =
random.choice(intlist)
print (random_int,intlist)
fplist = [1.1,2.2,3.3,4.4]
random_fp = random.choice(fplist)
print (random_fp,fplist)
strlist = (Best,Big,Boss,Bright)
random_str =
random.choice(strlist)
print (random_str,strlist)
mylist = [1,1.1'Pimnada']
random_str =
random.choice(mylist)
print (random_str,mylist)
myvar1 = 1
myvar2 = 2
myvar3 = 3
varlist = [myvar1, myvar2, myvar3]
random_var =random.choice(varlist)
print (random_var,varlist)
```

