

Function

print()	Display an information on the screen
int()	Change number to an integer
float()	Change number to an decimal number
input()	Ask for the information from the user
str()	A list of number, letter and symbols
len()	Length of the string
#	Comment
"""	Multiple Line Comment

Reverse A 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
    for letter in word:
        reverse = letter + reverse
    print ("Reverse: ", reverse)
```

Countdown Code

```
user_number = input("Please enter a number: ")
number = int(user_number)
countdown_string = ""
while number > 0:
    countdown_string = countdown_string + str(number)
    number = number - 1
    print (countdown_string)
```

List

```
'''SHOPPING_LIST=
['bags','shirts','pants']
list_num=0
while list_num <
len(shopping_list)
    print (shopping_list[list_num])
    list_num = list_num + 1
for item in in shopping lost:
    print (item)
```

Random

```
import random
# Create a list of integers
intlist = [1,2,3,4]
random_int =
random.choice(intlist)
print (random_int) #print the
entire list and the random item
# Create a list of floating point
numbers
fplist = [0.2,0.3,0.4]
random_fp = random.choice(fplist)
print (random_fp) #print the
entire list and the random item
# Create a list of strings
strlist = ("ABC","DEF","GHI")
random_str =
random.choice(strlist)
print (random_str) #print the
entire list and the random item
# Create a list of integers and
floating point numbers and strings
mylist = (2,3,0.4,"Hello")
random_item =
random.choice(mylist)
print (random_item) #print the
entire list and the random item
# Create a list of the following
variables
myvar1 = 1
myvar2 = 2
myvar3 = 3
```

Random (cont)

```
varlist = [myvar1, myvar2, myvar3]
random_var =
random.choice(varlist)
print (random_var) #print the
entire list and the random item
```

Operations

==	equal to
!=	no equal to
<	less than
>	more than
<=	less than or equal
%	Modulo, Calculate for Remainder
+	Add
-	Subtract
*	Multiplication
/	Division
**	Exponent

Convert To Hex

```
while True:
    user_number = input("Please
enter your number: ")
    number = int(user_number)
    hex_string = ''
    while (number > 0 ):
        remainder = number % 16
        if remainder == 10:
            hex_string = "A" +
hex_string
        elif remainder == 11:
            hex_string = "B" +
hex_string
        elif remainder == 12:
            hex_string = "C" +
hex_string
        elif remainder == 13:
            hex_string = "D" +
hex_string
        elif remainder == 14:
            hex_string = "E" +
hex_string
```

Convert To Hex (cont)

```
elif remainder == 15:
    hex_string = "F" +
hex_string
elif remainder < 10:
    hex_string =
str(remainder) + hex_string
    number = number // 16
    print ("Hexadeimal string is
0x"+ hex_string)
```

Area Of The Circle Code

```
while True:
    user_radius = input("What is
your radius of a circle? ")
    radius = float(user_radius)
    pi = float(3.1415)
    area = (pi) (radius) * 2
    print("The area of the
circle", area)
```

Upper and Lower Case

```
name = "one two"

print (name.upper()) → ONE TWO
print (name.lower()) → one two
print (name.capitalize()) → One two
print (name.title()) → One Two
```

Vocabulary

Variable	reserved memory locations to store values. This means that when you create a variable you reserve some space in memory
String	A list of character such as number, letter and symbols
Boolean	True/False
Integer	Whole Number or Counting Number
Syntax	Grammar of Python
Floating Point	Number in Decimal

Example Of Codes

```
2 – integer
2.5 – floating point
Print ("Hello") – string
mystring = 123 – variable
Print (mystr,"Hi",2,1.0) -- commas
mystr = "Hi"
mystr ← variable name
"Hi" ← value that can be change
print (int(1.5)) → 1
print (int("2")) → 2
print (float(1)) → 1.0
Modulo/Remainder %
print (4%2) → 0
print (30%7) → 2
```

Multiplication And String

```
String * Number
Ex. String * 5 = String String
String String String
String * String = Crash !
Number * Number = Multiply (Math)
Ex. 5 * 4 = 20
String ** String = CRASH!
Number ** Number = Exponent (Math)
Ex. 5**2 = 25
String ** Number = CRASH!
```

Guessing Game

```
import random
game_over = 1
chances = 5
score = 0
word =
['Dog', 'Cat', 'Fish', 'Pig', 'Elephant
']
random_word = random.choice(word)
while game_over != 0:
```

Guessing Game (cont)

```
print ("Word:", (word))
guess_word = input("Guess a
word: ")

if guess_word == random_word:
    print ("That's Correct
Guess!")
    print ("-----
-----")
    score = score + 100
    print ("Score:", (score))
    random_word =
random.choice(word)
else:
    if guess_word !=
random_word:
        chances = chances - 1
        print ("Chances
Remaining:", chances)
        if guess_word in word:
            print
("Sorry, Wrong Choice!")
            print ("-----
-----")
        else:
            print ("Sorry That
is not even in the list")
            print ("-----
-----")
            if chances == 0:
                game_over = 0
                print ("Game Over!")
                print ("The word
was", (random_word))
                print ("Final Score:",
(score))
```