

Common Mistakes	
Print(total)	Capital letters in variables names and commands
number1 = 25 number2 = 36 total = Number1 + numbr2	Spelling of variable names and commands
print("Hello World") print("Hello World"	Brackets and braces come in pairs, make sure that they are opened and closed.

Assignment Operators		Relational Operators	
Description	Operator	Description	Operator
Assign	=	Equal to	==
Add then reassign	+=	Less than	<
Subtract then reassign	-=	Greater than	>
Divide then reassign	/=	Not equal to	!=
Mod then reassign	%=	Less than or equal to	<=
Integer divide then reassign	//=	Greater than or equal to	>=

Random Functions	
Command	Comment
import random  random.randint(1,4)  random.choice(['H','T'])	Generates a random number between 1 & 4   Randomly select either 'H' or 'T'

Frequently Used Commands	
Command	Comment
print()	Used to display to the screen
input()	Allows user to enter value
int()	Converts value to integer
str()	Converts value to string
if <criteria>: ... elif <criteria>: ... else: ...	Selection statement used to give choices (or paths) that the program can follow depending on a decision.
for <criteria>: ...	Count controlled iteration, when you know how many iterations need to take place.
while <criteria>: ...	Condition controlled iteration, when you don't know how may iterations need to take place.

OOP			
Classes, Attributes & Methods		Attributes & Methods	Access Modifiers
class Pet: # define a class  def __init__(): # Constructor method		# Assign a class attribute self.name = "Dan"  # Define a class method def get_name(self): return self.name	public_method(self): _protected_method(self): __private_method(self):

Subroutines	
Procedure	Function
def <name>(): ...	def <name>(parameters): ... return parameters
<name>()	<name>(parameters)
Returns no value	Returns a value

Arrays	
Code	Comment
my_array = [ " ", " ", " ", " " ]	Creates a 1D array of strings with 4 elements
my_array = ["John", "Cathy", "Asif", "Maisie"]	Arrays can be declared with values assigned
2d_array = [[ " ", " " ], [ " ", " " ]]	Creates a 2D array
my_array[0] = "John" 2d_array[0][0] = "John" 2d_array[0][1] = "Doe"	Assigns a value to the 1 <sup>st</sup> element in an array

