Hack the Ram
Python Cheat Sheet

Function	Example	Output	Description
print(*string*)	print(“Hello World”) print(“Hello”, “World”) print(“Hello ” + “World”)	Hello World	This function allows the programmer to output data to the console for the user to see.
input(*string*)	name = input(“What is your name?”) age = input(“What is your age?”)	What is your name? What is your age?	This function allows the programmer to take input from the user and store into a variable.
var = *datatype*	var = “Hello World” var = 42 var = True	*“Hello World”* *42* *True*	Using a variable name that starts with a non-number/special-character name, the programmer can store data to be used later in the program.
str(*datatype*)	str(42) str(True) str(42.42)	“42” “True” “42.42”	Allows the programmer to change one datatype to another datatype. --- - Integers are whole numbers - Floats are integers but have a decimal place - Strings are text that has no numerical value unless converted
int(*string or float*)	int(42.42) int(“42”)	42 42	
float(*integer or string*)	float(42)	42.0	

“Python is an experiment in how much freedom programmers need.”
–Guido van Rossum

Numerical Operator	Meaning	Example
+	Addition	40 + 2 = 42
-	Subtraction	44 - 2 = 42
/	Division	42 / 2 = 21
*	Multiplication	21 * 2 = 42
**	Exponent	2 ** 2 = 4
//	Floor Division	43 // 2 = 21
%	Remainder	43 % 2 = 1

Logical Operator	Meaning	Example
==	Equal To	1 == 1? **True**
!=	Not Equal To	1 != 1? **False**
>	Greater Than	1 > 4? **False**
<	Less Than	1 < 3? **True**
>=	Greater or Equal To	1 >= 1? **True** 1 >= 2? **False**
<=	Less Than or Equal To	1 <= 1? **True** 1 <= 2? **True**
not	not	not True? **False**
and	and	True and False? **False**
or	or	True or False? **True**

List Method	Meaning
len(myList)	Returns the length of a list
myList.append(val)	Adds a value to the end of a list
myList.pop(index)	Removes and returns a value from a list
myList.remove(index)	Removes a value from a list
myList.index(val)	Returns the index of a value in a list
myList.insert(index,val)	Inserts a value at a specified index in a list

Decision Statements: if/elif/else:

```
age = int(input("What is your age?))
requirement = 16

if age >= requirement:
      print("You are allowed to drive.")
elif age < 0:
     print("You cannot be", age, "years old.")
else:
     print("You are not allowed to drive.")
```

IF STATEMENT SYNTAX NOTES:

- You MUST have a colon after the logic statement.
- Any code that you want to execute because of the `if` statement, MUST be indented 1 tab.
- `elif` can be used if you want another if statement to be checked if the ABOVE is False.
- `Else` can be used if none of the `if` or `elif` statements are True.

Example:

```
What is your age? 14
You are not allowed to drive.
---------------------------
What is your age? 16
You are allowed to drive.
---------------------------
What is your age? -4
You cannot be -4 years old.
```