STONE RIVER eLEARNING

Programming Syntax Cheat Sheet

Version 2.2

STEP NAME	LANGUAGE	SYNTAX

Start of the Code	**C++**	#include <iostream>
		using namespace std;
		int Main() {
		}

	Java	public static void main(String args[]) //All the code should be enclosed inside a class as well
	Javascript	<script> </script>
	Python	No specific start required
	PHP	<?php ?>

	C#	using System;
		namespace *Project_Name*
		{
		class *Class_Name*
		//Just like Java, in C# also all code is enclosed within a class
		static void Main() {
		{

	Ruby	No specific start required

Declaring a Variable	**C++**	int var_1; char var_2; float var_3 = 1.0;
	Java	public int var_1; public char var_1; public float var_3 = 1.0;
	Javascript	var var_1=2; var var_2="This is a string";
	Python	var_1=2 var_2= "This is a string"
	PHP	$var_1 = 2; $var_2="This is a string";

	C#	int myInt = 1;
		float myFloat = 1f;
		bool myBoolean = true;
		bool anotherBoolean;
		string myName = "John";
		char myChar = 'a';

	Ruby	$var_1=23 //Ruby Global Variable
		@var_2=23 //Ruby Instance Variable
		@@var_3=23 //Ruby Class Variable
		_var_4=23 //Ruby local variable
		var_5 = 23 //Ruby local variable

Function/Method Declaration	**C++**	int function func_01 {
		int var_1;
		char var_2;
		}

	Java	public static func_01 {
		public int var_1;
		public char var_2;
		}

	Javascript	function func_01 {
		var var_1=2;
		var var_2="This is a string";
		}

	Python	def func_01: var_1=2 var_2= "This is a string"

	PHP	function func_01 {
		var_1=2;
		var_2= "This is a string";
		}

	C#	public int func_01 {
		int var_1;
		char var_2;
		}

	Ruby	def func_01 _var_1=2 _var_2= "This is a string

If Statement		

	C++	if (x == 100)
		  cout << "x is 100";
		else
		  cout << "x is not 100";

	Java	if(x < 20) {
		  System.out.print("This is if statement");
		} else {
		  System.out.print("This is else statement");
		}

	Javascript	if (hour < 18) {
		  greeting = "Good day";
		} else {
		  greeting = "Good evening";
		}

	Python	a = 1
		if a > 5:
		  print "This shouldn't happen."
		else:
		  print "This should happen."

	PHP	if ($t < "20") {
		  echo "Have a good day!";
		}

	C#	a = 1
		if (a > 5)
		  Console.WriteLine("Hey! I am Trapped");
		else
		  Console.WriteLine("Now I am free");

	Ruby	x=1
		if x > 2
		  puts "x is greater than 2"
		else
		  puts "I can't guess the number"
		end

For Loop	**C++**	for (int n=10; n>0; n--) {
		  cout << n << ", ";
		 }

	Java	System.out.print("\n");
		String [] names = {"James", "Larry", "Tom", "Lacy"};
		for(String name : names) {
		  System.out.print(name);
		  System.out.print(",");
		}

	Javascript	for (i = 0; i < cars.length; i++) {
		  text += cars[i] + "
		";
		}

	Python	for item in items:
		  print(number, item)
		  number = number + 1
		print('loop ended, iteration count = ', number)

	PHP	for ($x = 0; $x <= 10; $x++) {
		  echo "The number is: $x
		";
		}

	C#	for (n=10; n>0; n--) {
		  Console.WriteLine("Hey! I am Trapped");
		}

	Ruby	for i in 0..5 puts "Value of local variable is #{i}" end
Taking Input from User	**C++**	cin >> x; //Takes the value from user and stores in x
	Java	Scanner user_input = new Scanner(System.in); String first_name; System.out.print("Enter your first name: "); first_name = user_input.next( );
	Javascript	var customerName = prompt("Please enter your name", "<name goes here>");
	Python	person = input('Enter your name: ') print('Hello', person)
	PHP	//In PHP taking input from user will need a PHP form # This is also a one line comment /* PHP also supports C style comments */ <form action="welcome.php" method="post"> Name: <input type="text" name="name"> E-mail: <input type="text" name="email"> <input type="submit"> </form>
	C#	String var_1= Console.ReadLine();
	Ruby	$var1 = gets //Takes user input passed as argument $var2=gets.chomp //Same as above with no line breaks $var3= STDIN.gets //Reads from console even if ARGV is empty

Write Operation/ Output	**C++**	cout << "Output sentence"; // prints Output sentence on screen
		cout << 120; // prints number 120 on screen
		cout << x; // prints the value of x on screen

	Java	System.out.print(name);
	Javascript	My First Web Page My first paragraph. <script> document.write(5 + 6); </script>
	Python	person = input('Enter your name: ') print('Hello', person)
	PHP	echo "Hello world!"; echo "I'm about to learn PHP!";
	C#	Console.WriteLine("Hey! I am Trapped");
	Ruby	puts "This is awesome"
Arrays	**C++**	int marks [] = {3,4,3,2,1};
	Java	dataType[] arrayRefVar = new dataType[arraySize];
	Javascript	var cars = ["Saab", "Volvo", "BMW"];
	Python	['red', 'green', 'blue'] [1, 3, 5, 7, 9, 11] ['silly', 57, 'mixed', -23, 'example'] //These are Python lists
	PHP	$cars = array("Volvo", "BMW", "Toyota");
	C#	int [] marks = new int[] { 99, 98, 92, 97, 95};
	Ruby	nums = Array[1, 2, 3, 4,5]