


Godot Cheat Sheet v4.2

<h1>Var Creation</h1> <pre>var variable_name = initial_value @export var variable_name = start_value @export var variable_name : ModelType @ready var variable_name = variable</pre>	<h1>For Loop Creation</h1> <pre>for i in for_loop_variable: print(i) #the i, is a "new" variable created for every item in for_loop_variable</pre>	<h1>Vector2D Funcs</h1> <pre>distance_to(Vector2) normalized() length() limit_length(length) move_toward(Vector2, delta)</pre>	<h1>Shortcuts</h1> <pre>UNIVERSAL ctrl+S #SAVE GAME!!! F5 #run game F6 #run current scene ctrl+z #undo ctrl+shift+z #redo ctrl+F1 #scene editor SCENE EDITOR Q #select node W #move node E #rotate node S #scale mode G #pan mode, or use mm button ctrl+L #lock node ctrl+A #create new node</pre>	<h1>Common Actions</h1> <pre>CREATING A NODE node.instantiate() add_child(node) ACCESS NODES get_parent() get_node('NodeName') OR \$NodeName get_children() PAUSING CODE EXAMPLES await get_tree().create_timer(1).timeout #pauses code for time await animation_player.animation_finished #waits for an animation to finish RANDOM TIPS bool != bool #toggles boolean Engine.set_time_scale(.1) #slows game</pre>
<h1>Var Types ex.</h1> <pre>String: "I'm a String, '010'", "12", '10' Float: 1.23400, 0.0, 0.09123041 int: 123, 1, 0 bool: false(0, null, false), true(anything that's not false) Array: [1,5,2], ['string'], [[]],1,true] Dictionary: {}, {'key', 'value'}, {1, 2} Vector2: Vector2(1,2), Vector2(',', true)</pre>	<h1>Operators</h1> <pre>#Arrays are commonly used with for loops a + b #addition a - b #subtraction a * b #multiplication a / b #division a % b #modulus a ** b #power = #var = new_var -= #var = var - new_var += #var = var + new_var *= #var = var * new_var /= #var = var / new_var **= #var = var ** new_var %= #var = var % new_var</pre>	<h1>Node2D Funcs</h1> <pre>move_local_x(variable) #similar to position += transform.x * variable refer to graphic move_local_y(variable) look_at(Vector2)</pre>	<h1>CODE EDITOR</h1> <pre>ctrl+k #line/selection comment ctrl+f #search ctrl+left/right arrow key #jump word tab #indent shift+tab #un-indent ctrl+click #open docs</pre>	
<h1>If Creation</h1> <pre>if variable == 12: #if statement print('variable is cooler than 12') elif variable > 12: #else if statement print('it aint = but its greater') else: #else statement print('nothing above was true')</pre>	<h1>Assignment</h1> <pre>= #var = new_var -= #var = var - new_var += #var = var + new_var *= #var = var * new_var /= #var = var / new_var **= #var = var ** new_var %= #var = var % new_var</pre>	<h1>Rotation</h1>  <pre>Transform.x Transform.y angle_difference(from, to, delta) rotate_toward(from, to, delta) lerp_angle(from, to, weight) rad_to_deg(radian angle) deg_to_rad(degree angle) from_angle(angle) #same as Vector2(cos(angle), sin(angle)) angle() angle_to(Vector2 to) angle_to_point(Vector to) rotated(angle)</pre>		
<h1>Func Creation</h1> <pre>func function_name(): #no parameter pass func function_with_param(param_name): param_name += 1 return param_name #optional</pre>	<h1>Comparison</h1> <pre>a == b #equal a != b #not equal a < b #less than a <= b #less than or equal a > b #greater than a >= b #greater than or equal</pre>	<h1>Math</h1> <pre>sin(angle), cos(angle), tan(angle) #radian asin(cord), acos(cord), atan(cord) atan2(cord_y, cord_x) #very useful clamp(variable, max, min) floor(variable) #rounds down max(var1, var2, var3, etc...) min(var1, var2, var3, etc...) abs(variable) round(variable) sign(variable) randi() randf() randf_range(from, to) lerp(from, to, weight) move_toward(from, to, amount)</pre>		
<h1>Example Code</h1> <pre>func function_name(): le_number = 13 print(variable) #should only print 13 le_number += 1</pre>				