## $((($ Sonic $\pi)))$ Cheat Sheet

| INSTRUCTION | WHAT IT DOES | EXAMPLE |
| :---: | :---: | :---: |
| Playing sounds |  |  |
| play 60 | plays the note 60, 100 is high, 0 is low | play 60 |
| sleep 0.25 | rest for 0.25 of a second before playing the next sound | play 60 <br> sleep 0.25 <br> play 50 |
| $\begin{aligned} & \text { play } 100 \\ & \text { play } 60 \\ & \text { play } 30 \end{aligned}$ | Play the notes, 100, 60, 30 together | $\begin{aligned} & \text { play } 100 \\ & \text { play } 60 \\ & \text { play } 30 \end{aligned}$ |
| with_tempo 200 | plays the sounds at 200 bps | with_tempo 200 play 60 |
| play_pattern [ ] | play the string of notes 50,60,35,60 | play_pattern [50,60,35,60] |
| play_chord [ ] | play the chord 40, 36, 50 | play_chord [40, 36, 50] |
| Repeating |  |  |
| 2.times do | repeat the pattern or sound twice, 2 can be replaced with different values | $\begin{aligned} & \text { 2.times do } \\ & \text { play } 60 \\ & \text { end } \end{aligned}$ |
| Bolt-Ons |  |  |
| .sort | Sorts a pattern of notes into order | play_pattern [40, 34, 60].sort |
| .shuffle | Shuffles the order of the notes in a pattern | play_pattern [40, 34, 6].shuffle |
| .reverse | reverses the order of the notes in a pattern | play_pattern <br> [50,60,35,60].reverse |
| .shuffle | Shuffles the order of the notes in a pattern | play_pattern [50,60,34].shuffle |
| + ran(10) | Changes the note pitch by a random value between 1 and 10 | ```3.times do play 60 + rand(10) sleep 0.5 end``` |
| Changing The Sounds |  |  |
| with_synth | changes the sound being played | with_synth "saw_ beep" |
|  | with_synth "beep" | with_synth "fm" |
|  | with_synth "dull_bell" | with_synth "pretty_bell" |
| stop | stops all sounds playing | stop |
| Looping |  |  |
| in_ thread do | Plays the notes in the thread whilst other notes are being play | in_thread do 10.times do play 60 sleep 0.25 end end |

$(((\mathrm{Sonic} \pi)))$ cheatshect

| INSTRUCTION | WHAT IT DOES | EXAMPLE |
| :--- | :--- | :--- |
| Playing sounds |  |  |
| play 60 | plays the note 60, <br> 100 is high, 0 is low | play 60 |
| sleep 0.25 | rest for 0.25 of a second be- <br> fore playing the next sound | play 60 <br> sleep 0.25 <br> play 50 |
| play 100 <br> play 60 <br> play 30 | Play the notes, 100,60, 30 <br> together | play 100 <br> play 60 <br> play 30 |
| with_tempo 200 | plays the sounds at 200 bps | with_tempo 200 <br> play 60 |
| play_pattern [ ] | play the string of notes <br> $50,60,35,60$ | play_pattern [50,60,35,60] |
| play_chord [ ] | play the chord 40, 36,50 | play_chord [40, 36, 50] |
| Repeating |  |  |


| Repeating |  |  |
| :--- | :--- | :--- |
| 2.times do | repeat the pattern or sound <br> twice, 2 can be replaced with <br> different values | 2.times do <br> play 60 <br> end |
| Bolt-Ons |  |  |
| .sort | Sorts a pattern of notes into <br> order | play_pattern [40, 34, 60].sort |
| .shuffle | Shuffles the order of the notes <br> in a pattern | play_pattern [40,34,6].shuffle |
| .reverse | reverses the order of the notes <br> in a pattern | play_pattern <br> [50,60,35,60].reverse |
| .shuffle | Shuffles the order of the notes <br> in a pattern | play_pattern [50,60,34].shuffle |
| + ran(10) | Changes the note pitch by a <br> random value between 1 and <br> 10 | 3.times do <br> play 60 + rand(10) <br> sleep 0.5 <br> end |
|  |  |  |

Changing The Sounds

| with_synth | changes the sound being <br> played | with_synth "saw_beep" |
| :--- | :--- | :--- |
|  | with_synth "beep" | with_synth "fm" |
|  | with_synth "dull_bell"" | with_synth "pretty_bell"" |
| stop | stops all sounds playing | stop |
| Looping |  |  |
| in_thread do | Plays the notes in the thread <br> whilst other notes are being <br> play | in_thread do <br> $10 . t i m e s ~ d o ~$ <br> play 60 <br> sleep 0.25 <br> end <br> end |

