

# libchar Quick Reference

[github.com/LieutenantPorky/libchar](https://github.com/LieutenantPorky/libchar)

## Setup

**libchar.setup(width, height)** – create a screen with given width and height, and setup the environment

**libchar.set\_background(path)** – set the image at the given path as the background

## Agents

**my\_agent = libchar.Agent(path)** – create a new agent using the image at the given path

**my\_character = libchar.Character(path)** – create a new character using the image at the given path. Characters work just like agents, but won't get garbage-collected

**my\_agent.move(position)** – move an agent to a new position. Position is calculated based on an agent's center

**my\_agent.velocity** – an agent's velocity: has an x and y component, and can be read and set

**my\_agent.set\_rotation(angle)** – set the rotation of an agent

**my\_agent.rotate(angle)** – apply an additional rotation to an agent

**my\_agent.get\_height()** – get the height of an agent

**my\_agent.get\_width()** – get the width of an agent

**my\_agent.kill()** – delete an agent

## Collisions

**`my_agent.add_tag(tagname)`** – add a tag to an agent

**`my_agent.remove_tag(tagname)`** – remove a tag from an agent

**`my_agent.is_colliding(other_agent)`** – returns true if *other\_agent* is colliding with the agent

**`my_agent.is_colliding_tag(tagname)`** – returns the first agent with tag *tagname* that is colliding with the agent. If there are no colliding objects, returns None

## Constants

**`libchar.dt`** – returns the length of time taken up by a frame

**`libchar.frame`** – returns the number of frames since launch

**`libchar.living`** – returns a list of all living agents and characters

**`libchar.screen`** – returns the pygame screen object of the application

**`libchar.gc_int`** – interval in frames between garbage collection passes. GC involves deleting all agents (not characters) that are far from the screen area. Setting *gc\_int* to 0 disables garbage collection.