Overall game logic

START

Verify command line arguments

Arguments good?

Y

Load world

Load successful?

Y

Start player at room 0

N

Exit with status 4

Load unsuccessful?

Y

Print usage and exit with status 3

N

Print room

Get user command

Do command (See action flowcharts)

"Unknown command: "%s\n"

Return value?

OK

WIN

QUIT

Exit with status 0

INVALID

LOSE

Exit with status 1

Exit with status 2
Action: Miscellaneous commands

- **action_quit**
  - "You give up.\n"
  - return QUIT

- **action_look**
  - Print the room
  - return OK

- **action_inventory**
  - Print the inventory
  - return OK
**Action: Movement commands**

- action_north, action_east, action_south, or action_west

Room has enemy?
- Y: "You try to escape, but it's too late -- the monster grabs you and swallows you\n" "whole. You lose. Goodbye.\n"
- N: "You can't go that way!\n"
  - return LOSE

Room has an exit in this direction?
- Y: Update player position.
- N: "You travel %s.\n\n"
  - Print room
    - return OK
action_get_key

Is there a key in this room? N

Is there a monster in this room? Y

"You spend the final seconds of your life trying to pick up an object that isn't there, and the monster swallows you whole. You lose. Goodbye."

return LOSE

Y

"There's no key here!"

return LOSE

N

"You pick up the key."

"You scramble to pick it up, but the monster blocks your path and strikes you down in an instant. You lose. Goodbye."

return LOSE

N

"You pick up the key."

Remove the key from the room; add a key to the inventory. (If the player already has a key, just ignore it; they can't have two.)

return OK
Is there a weapon in this room?

- Yes
  - Is there a monster in this room?
    - No
      - "You spend the final seconds of your life trying to pick up an object that isn't there, and the monster swallows you whole. You lose. Goodbye."
    - Yes
      - "You scramble to pick it up, but the monster blocks your path and strikes you down in an instant. You lose. Goodbye."
  - No
    - "There's nothing like that here!"

Is there a monster in this room?

- Yes
  - "You pick up the crescent blade."
  - "You scramble to pick it up, but the monster blocks your path and strikes you down in an instant. You lose. Goodbye."
- No
  - "You spend the final seconds of your life trying to pick up an object that isn't there, and the monster swallows you whole. You lose. Goodbye."

Remove the weapon from the room; add a weapon to the inventory. (If the player already has a weapon, just ignore it; they can't have two.)
Action: Open chest

"There's no chest here to open!"

Is there a monster in this room?

Y

"You frantically attempt to open a chest in this room, but there is no chest here. Meanwhile, the monster has eaten you. You lose. Goodbye."

N

Is there a chest in this room?

Y

"Inexplicably, you ignore the giant shrieking monster, and attempt to calmly walk over to the chest and open it up. The monster is confused for a moment, but soon recovers and murders you handily. You lose. Goodbye."

N

Is there a monster in this room?

Y

"You fumble with the chest's lock to no avail...you need the key!"

N

Does the player have the key?

Y

"This is it! You insert the key into the lock on the chest, and give it a turn. You hear a click, and the top bursts open revealing two bearded men from the '70s, each made of solid gold! You WIN! Goodbye."

N

return OK

return LOSE
Action: Kill enemy

action_kill_enemy

Is there a monster in the room?

"You flail about heroically, but there's nothing here to fight."

Does the player have the weapon?

"You cry out and begin flailing your arms at the beast. He stands still while you get it all out of your system, then when you collapse, exhausted, he calmly eats you. You should have brought a weapon. You lose. Goodbye."

"You look the monster in the eye and leap forward while thrashing your crescent blade wildly. You somehow cleave your foe in half, which turns out to be its main weakness. It is dead. I guess this is an ethical thing you did?"

Remove the monster from the room.

return LOSE

return OK