

**PROGRAMMING CLUB  
NOVEMBER 11TH, 2019**

**SUDO CODE VERSIONS DUE AFTER THANKSGIVING**

**DECEMBER 4TH SUDO CODE DUE**

**ASTRONAUT GAME:**

The premise of the game is to defeat aliens. The setting of the game will be similar to Megaman/ Super mario.

SOLO LEARN: <https://www.sololearn.com/>

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## **BASICS**

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**STEPS:**

**CHARACTER CONTROLS**

You begin on a base with challenging obstacles and objects in front of you that prevent you from passing by.

- When (UP/DOWN/LEFT/RIGHT) key is pressed the player will do the following action:
  - a. **Up arrow-** jump
    - IF UP key is pressed
    - Command character to jump up
    - IF Character hits his head on an object above him say “Ouch” and fall
    - ELSE Continue to jump up
  - b. **Down arrow-** nothing
    - IF a trapdoor is placed beneath the player, enter/go down
    - ELSE there are no objects below do nothing
  - c. **Right arrow-** move to the right
    - IF right key is pressed
    - Command character to move 1 unit to the right
  - d. **Left arrow-** move to the left
    - IF left key is pressed
    - Command character to move 1 unit to the left
  - e. **Space bar-** attack
    - IF space bar is pressed
    - Command character to fire space blaster
    - IF laser contacts an alien remove 1 health from the alien. The alien will glide back 1 unit
    - IF the alien’s health is at 0, the Alien dies
    - ELSE remove 1 health

### **SPECIAL BOXES**

- The character strikes a power up block  
IF the player's attack meter is >3 (3 is the max) reward player with 1 attack  
ELSE (the attack meter is =3) do nothing
  - The character strikes a health box  
IF Player's health is =0 do nothing  
ELSE Player's health is <0 add (1) health to the Player
  - IF Character comes into contact with an ammo chest award player with more lasers/bullets.  
IF the player's attack bar is full do nothing  
ELSE Add ammo to the ammo bar
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### **ALIEN CONTROLS**

**Aliens will be located throughout each level. They will remain stationary unless attacked.**

#### **ALIENS**

- Aliens will move back and forth and attack the player when contact is made:
    - a. IF Health reaches zero character dies, say "Game Over" and end the game  
ELSE Player will lose (1) amount of health
  - Alien will periodically fire lasers at main character  
The alien will fire a blaster every two seconds into the direction they are facing. They will be facing 180\*.  
IF the character strikes the alien. The alien will turn red for a brief moment and its health bar is = 0, the alien will dissolve  
ELSE the health bar is <0, remove 1 health
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### **OUTLINE**

- **When the game beginnings spawn 2 aliens in front of the character**
- **The Aliens will switch appearances to make it seem that they are breathing heavily (alive). They will remain in one spot until the player approaches them. Then, the aliens' stature will become hostile/defensive.**
- **When the player attacks the aliens, the aliens will be programmed to attack back.**

### **DIALOGUE**

"The aliens have invaded the international space station and it is your job to reclaim it." "These organisms have raided our weapons supply, so recover ammo and health as you go."

### **LIST OF VARIABLES IN GAME:**

- Main Character: Astronaut
- Attackers: Aliens
- Supply Crates
- Ammo drops
- Crawlers - will move back and forth
- Background: Space station

