

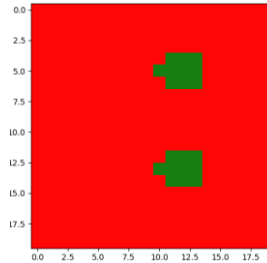
7.5. Move a Video Character

1. Open `/home/pi/AOLME/Session7/VideoDemo.py` and run the code.

What is the background?

How many characters do you see?

How do the characters move?



Work through the code line-by-line and discuss:

How is the background defined?

How are the characters defined?

3. **Copy a portion of a frame:** Find the following line of code, uncomment it, and run:

```
frame1[10:13,8:12] = frame1[2:5,8:12]
```

Note that rows 10, 11, and 12 and columns 8, 9, 10, 11 are copied.

Like for `range()`, you stop at `row=13`, `column=12`. Thus, `row=13` and `column=12` are NOT copied.

2. **Analyze and modify:** Find the following code and discuss what it does. **How does it work?**

```
move_r = 2
for row in range(rows):
    for col in range(cols-move_r):
        frame2[row][col+move_r]=frame1[row][col]
```

Go through the code and discuss the code that produces the other 3 movements.

4. **Discuss the following:**

What are the advantages of using the move code as opposed to defining the entire frame again?

Co-facilitator should lead the discussion back to the projects and coding movements. Students should pick their favorite characters and describe how they want them to move.