Testing and Debugging Tables – use as needed – add rows if more space is needed

* You are communicating your programming work flow
* Log the syntax errors, and the logical errors you are fixing
* When testing, think about what the user will do when interacting with your game

| **Date** | **Snapshot of Code** | **Snapshot of Error (syntax or logical)** | **Snapshot of Fixed Code** | **Explanation of Fix (include error name)** |
| --- | --- | --- | --- | --- |
| **10/03/2025** |  | Pressing spacebar does not behave like a jump because I have to hold down space to go up |  | Used the keydown event instead of key get pressed so it gets a single input instead of a constant hold |
| **10/03/2025** |  | Pressing spacebar instantly teleports player up, there is no jumping motion. |  | Code would stop on the while loop until it is finished, meaning that when the display refreshed, the player would instantly be moved to the peak of the jump. This was fixed by moving the jump into the main game loop. |
| **14/03/2025** |  | User cannot close game while intro messages are playing |  | Fixed by having the intro messages run on a timer in a game loop with the quit event. |
| **24/03/2025** |  | Tried to make the jump feel more natural, but the jump just gets weaker after every jump |  | Jumping motion is now more natural. Fixed by removing the jump timer and adding a line of code to reset jump strength to jump gravity after each jump, so the jumps wouldn’t get weaker |
| **24/03/2025** |  | Player clips through floor after jumping, but it seems that the player doesn’t continue falling after going out of the screen |  | Was an issue with the code for gravity. Having the jump subtract the players y position while gravity also subtracted the y position was too much, causing the player to speed out of the screen. Fixed it by putting the gravity in an elif statement so it only ran when the jump stopped |
| **24/03/2025** |  | Code works fine for a single jump, but I cannot jump another time in the air anymore |  | Allowed multiple jumps in the air (fixed by ditching the jumping boolean). Got sidetracked and also fixed a bunch of other stuff: Player now cannot jump above or fall below screen (fixed by resetting player velocity to 0 when they’re detected outside). Player now has a limit to how fast they can fall (fixed by not allowing jump\_strength to roll too far into the negatives). Removed the section for gravity and just let the jump section do it (to be a little more efficient with my code). |
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| **Test Input (test case)** | **Expected Output** | **Actual Output** | **Fix Needed?** |
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| *expected input* |  |  |  |
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| *boundary input* |  |  |  |
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| *invalid/unexpected/unusual input* |  |  |  |
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