

# Bomber Bugs

## Bug 1

There seems to be a bug where the bomb is not redrawn after the bomb goes through the ground but not when it hits the building. The bomb should be redrawn in any case and not just when it hits the building. To fix the issue, I added an `elif` statement in the `check_bomb` function to account for the bomb exploding when the bomb's y coordinate exceeds the canvas height.

## Bug 2

I'm not sure if this is a bug or not but the texts for game over, level, and score is quite hard to see. It should be a brighter colour with a lot of contrast with the game's background. To fix it, I've added a fill variable to the `game_over` and `display_score` function, changing the colour to blue which contrasts with the other colours in the game.

## Bug 3

The rightmost building is virtually impossible to hit as the time taken to release the bomb as the plane resets from the right is not enough to release the bomb immediately. The plane should be able to explode bombs to all of the buildings. To fix this, I readjusted the range to initialise the buildings from 0 to 900, which is 100 pixels less than the right edge of the canvas. This allows me to drop bombs on all the buildings.

## Bug 4

There is another bug where once all the buildings are cleared, there is still a bug where the game still outputs game over when the plane hits the canvas floor which should theoretically proceed to the next level once it lands. I suspect it has something to do with the buildings shrinking to below the canvas floor. I fixed it by adding a conditional statement in the `shrink_building` function to account for the heights being either more than the canvas floor and equal to the canvas floor. This prevents the building height from being negative. I also modified the `check_plane` function to account for this conditional statement.

## Bug 5

There is another bug where once you go into the next level, the game does not seem to reset properly. For example, the buildings do not shrink properly after a bomb is dropped. I have not found a solution for the bug.

