For task 1, I added collisions the following way:

For each sprite group, I would iterate through each sprite in the group and check collisions. First I checked collisions with the player character and had different effect based on the type of the sprite, using isinstance(). Next, I added collisions with blocks by first checking if the sprite was not a block (since blocks shouldn't collide with each other), and then iterating through every block in the block group to check for collisions.

For task 2, I added a few new features:

Lives system. You now have lives which you lose on collisions with blocks. If you run out of lives, you lose.

I added 3 new power up types: life gain, invincibility, and size reset.

Life gain: Grants 1 life.

Invincibility: Grants 5 seconds of invincibility

Size Reset: Resets size to the starting amount

For task 3, I added:

- a high score system which uses a file to track your high score.

- I also added a life counter to keep track of your lives.