

## Tasks

- check if the positive indices and negative indices generation is correct for the generated square ground truths
- add sorting to the negative indices
- add for loop to the whole thing to do one forward pass
- add backward pass

## Notes

- Keep in mind that **img** variable is just the first image of the generated set of images

## Issues

- Have to be careful about the what is the dimension of the ground truth box. So for now will stick with the form
  - bounding box : [center x, center y, width, height, class 1, class 2]
  - Single Image : [number channels, size x, size y]
- The tensor size then becomes
  - **gt** : [1, number of images, 6 ]
  - **images** : [1, number of images, number channels, size x, size y]
- The above names should be the names of the variables in the code.
- The pos indices dont make sense for the generated boxes. Have to check that carefully
- *Fixed the above issues, was using the top right rather than the center.*