➢ Assumptions and description

- I have assumed the coordinates to be polar. The function is not nice at origin.
- I have converted the polar coordinates to Cartesian. As I knew calculating gradient manually in this coordinate system.
- I have considered the centre at (0,4) and value of A as -4 so that things look a little nicer.
- I have first calculated the function phi, stored it in a matrix and then I have calculated the gradient manually, its being stored in the matrices gx and gy.
- I have added a folder named snapshotsandvideo, it contains the representative snapshots in form of images (.png files) and a video. **Sir, I hereby request you to once see the folder.**