



# IMAGE PROCESSING

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# WHY THIS TOPIC ?

- Today is ERA of Deep Learning and DIP So , We decide to implement this concepts as Our Software Group Project.
- Image Filtration is one of very precisions part of image processing.
- Image Detection is another topic which might be attractive nowadays.
- On windows , In System Image Viewer We can't have filter options and flipping functionalities.



# LANGUAGE AND SOFTWARE USED:

- We use Java Programming for our Project.
- Software is used for this project is NetBeans and IntelliJ.



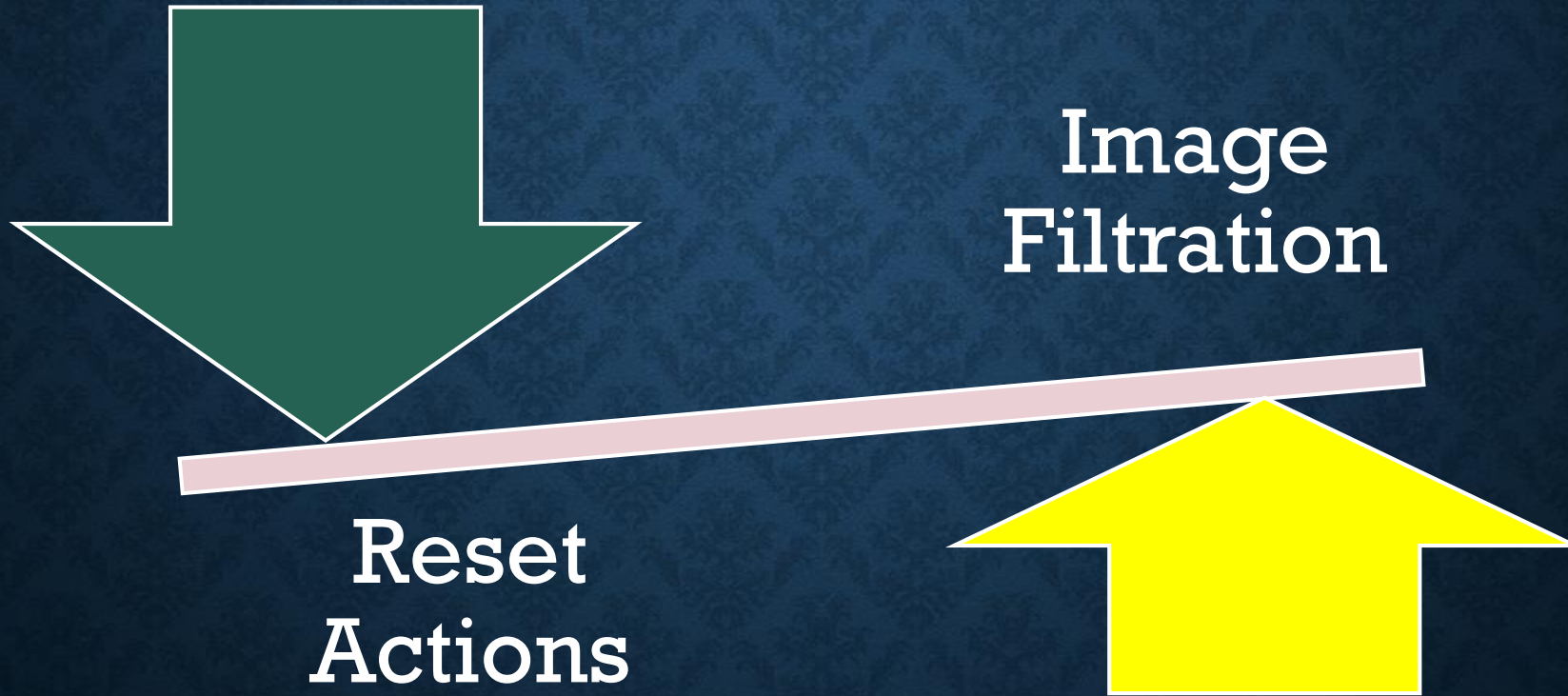
**NetBeans**

# DESCRIPTION

- In our project, First user have to input an image file.
- Then ,We are given you options for filtering importing image in many ways.
- Or you can flipping image on both sides : up-down and right-left.
- After Selecting your option , Output will be displayed as per your input.
- You can save that filtered image.



# PHASES OF PROJECT

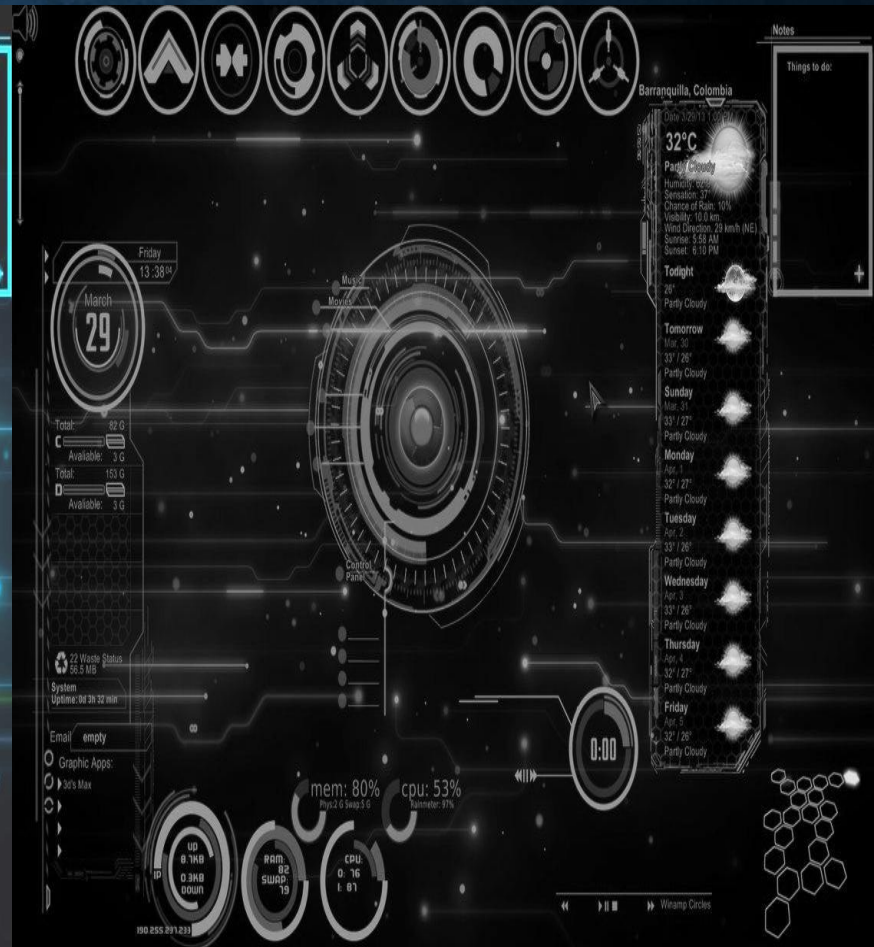
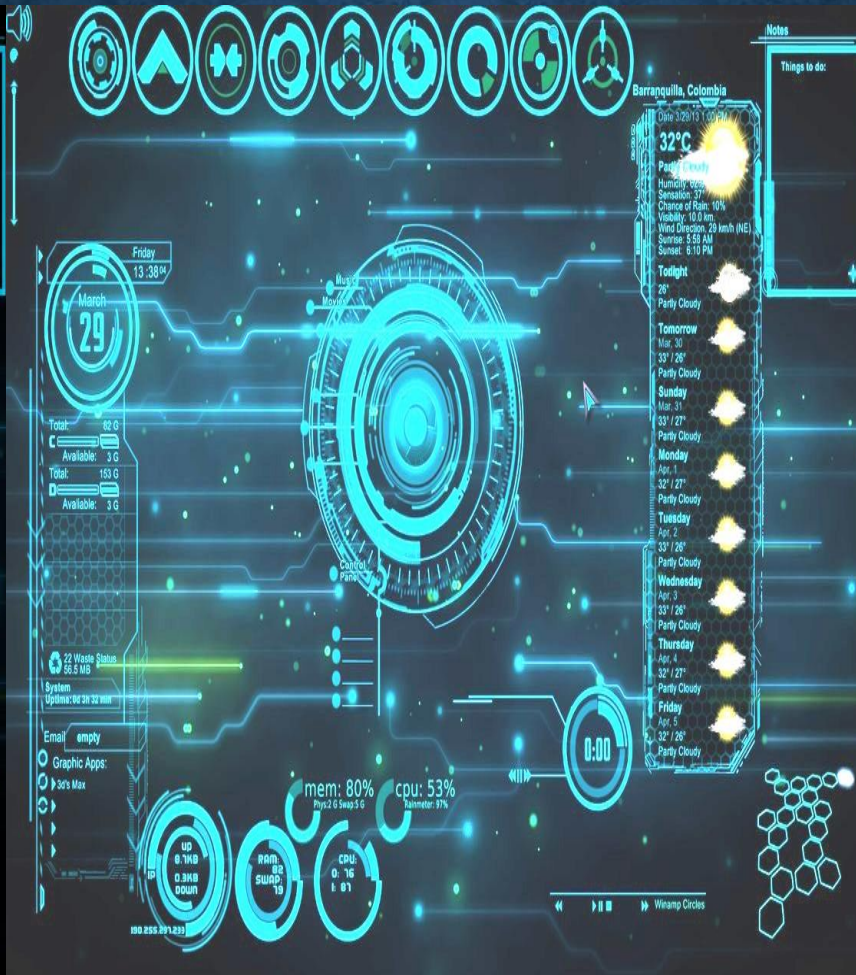
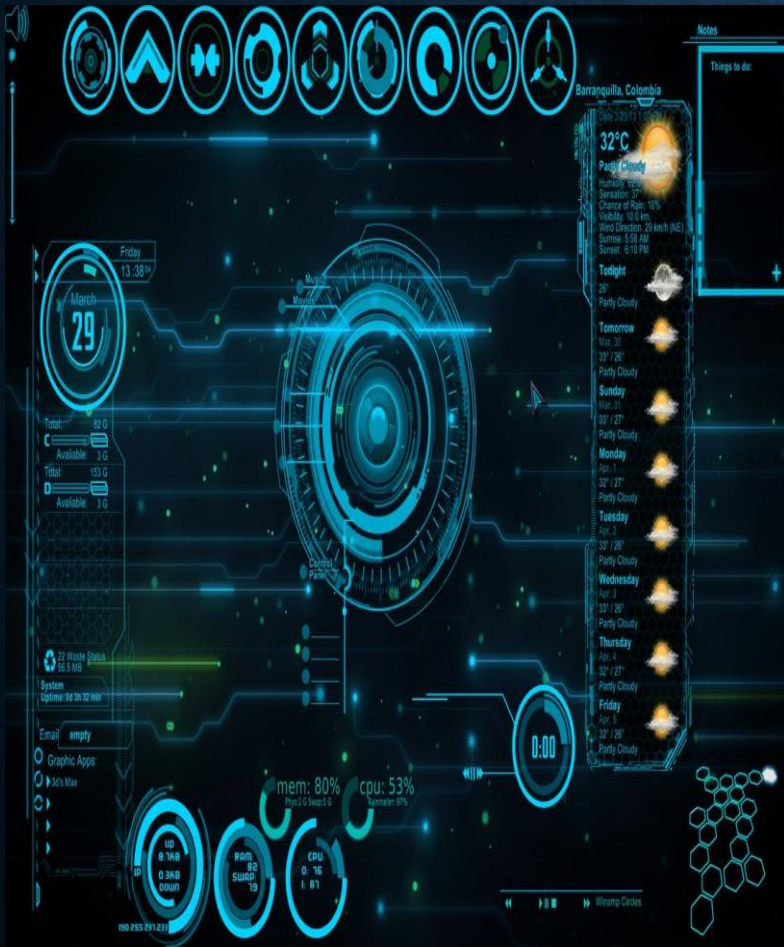


# DEMO

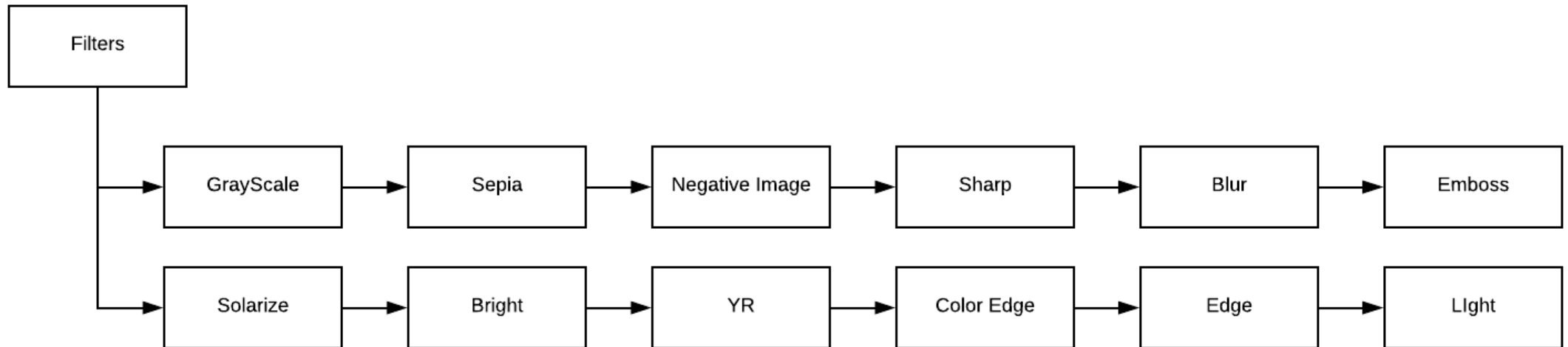
- We are given you a sample demo of our project.
- So that You can easily understand our project without facing any difficulty.
- So , Ready for small Demonstration of our project.
- Follow the steps for understanding our project as We shown you after this slide.



# PHASE-I (IMAGE FILTRATION)

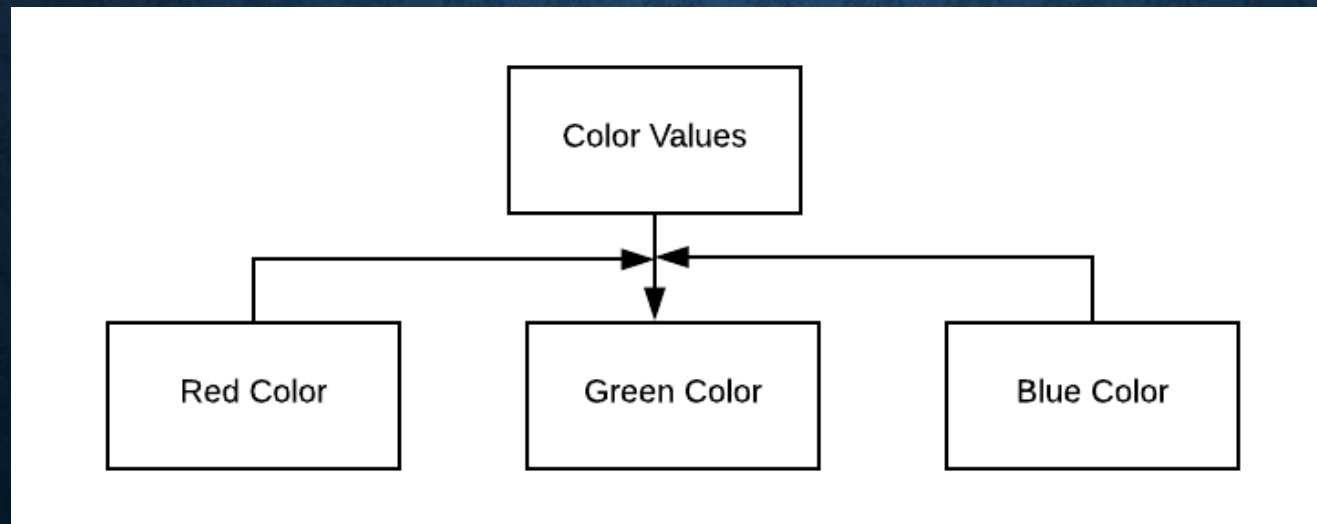


- In this phase We will provide you many different filters for filtration purpose which is given below :

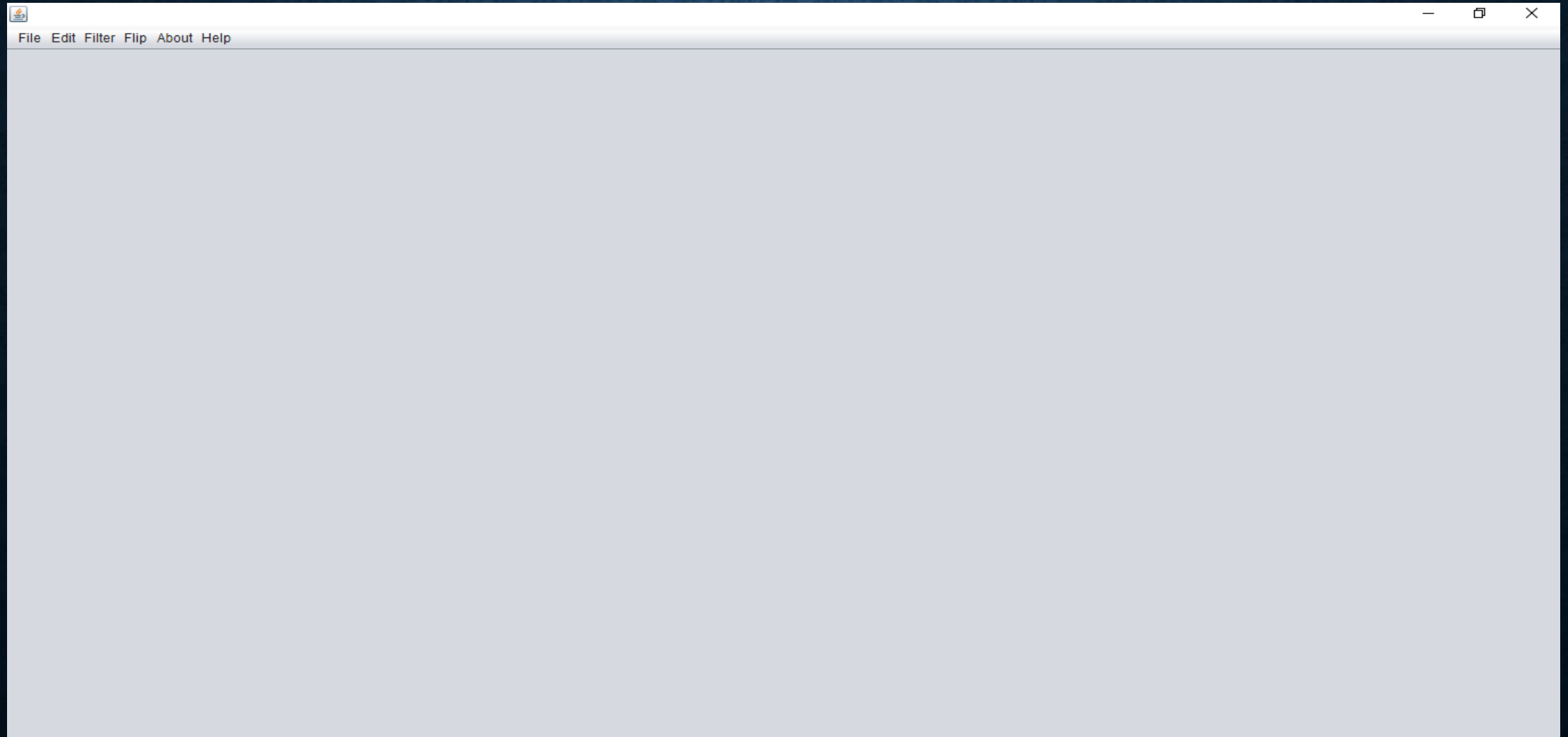




- You can change RGB values of pixels so that you can get several different new shades of image as per changing following values :

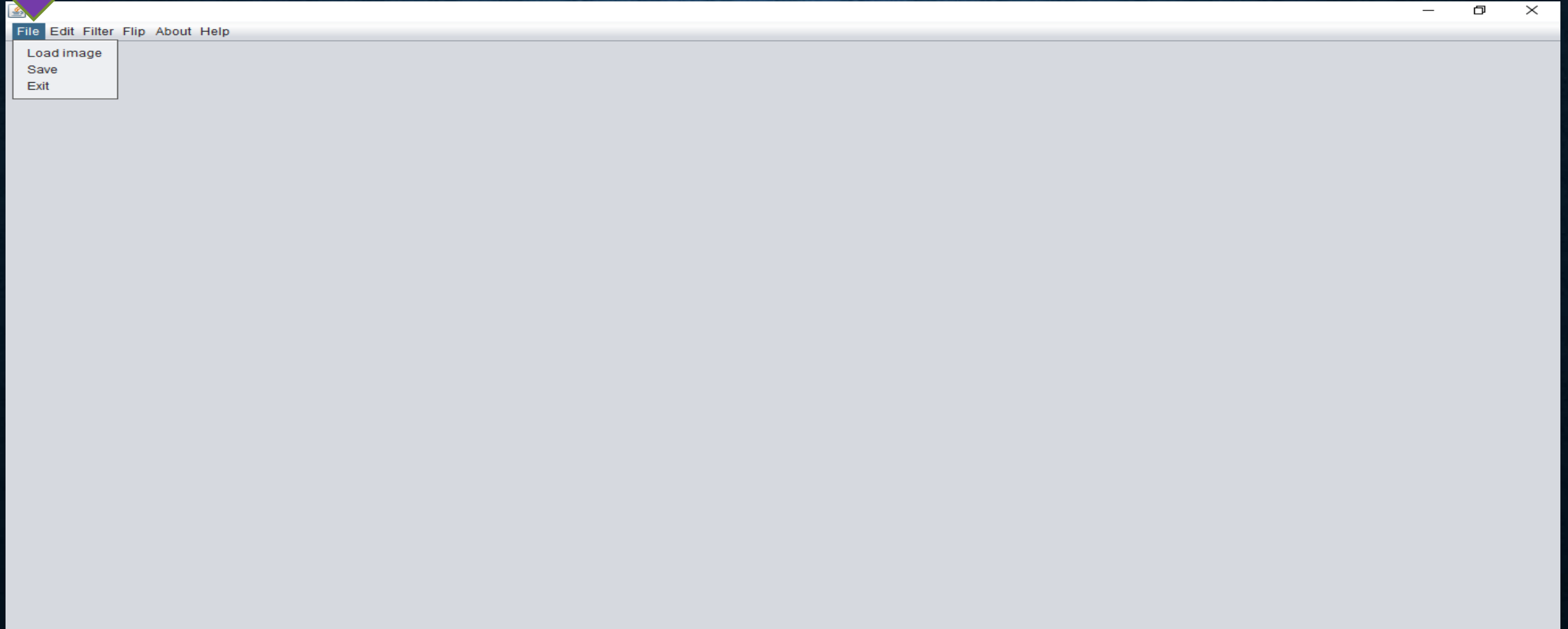


# OPEN SOFTWARE

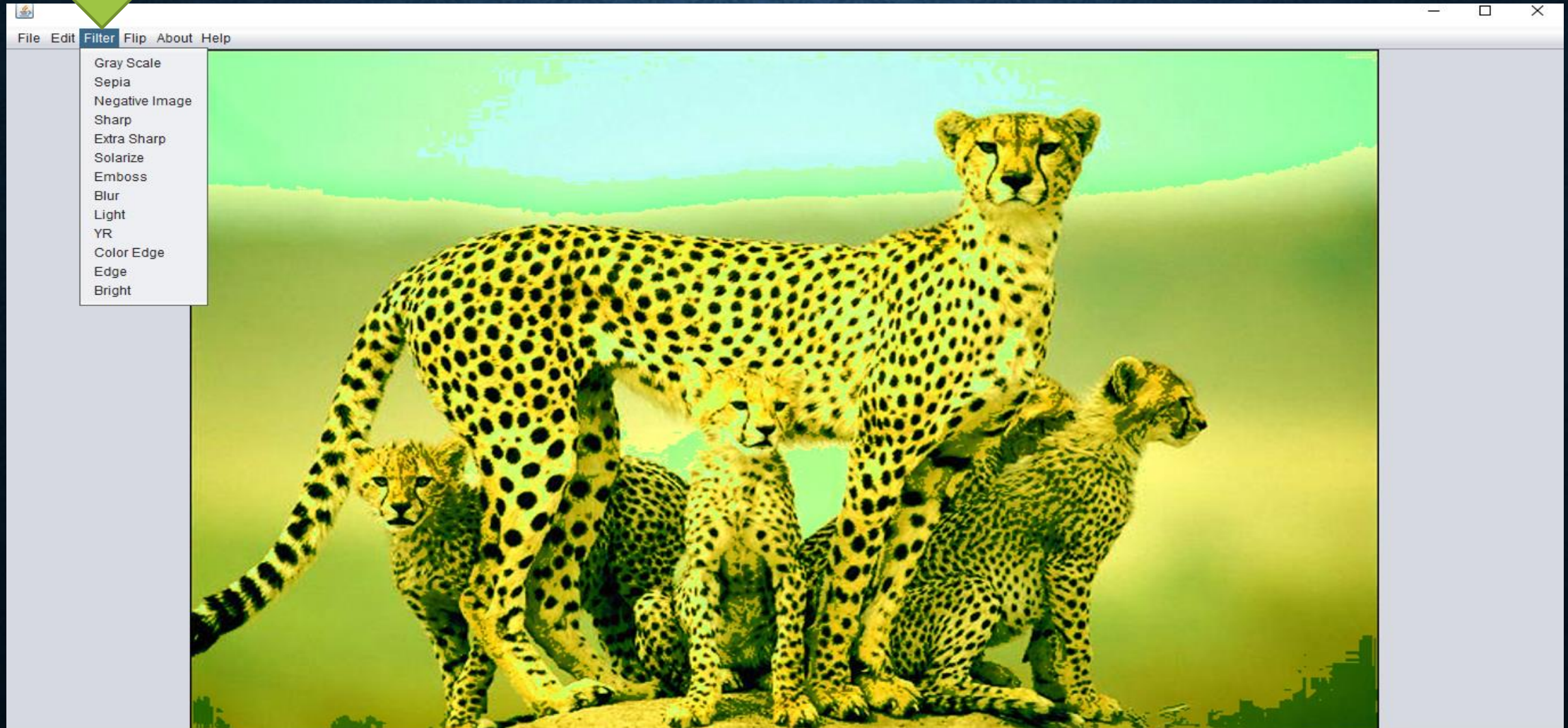




**YOU CAN IMPORT IMAGE FROM HERE**

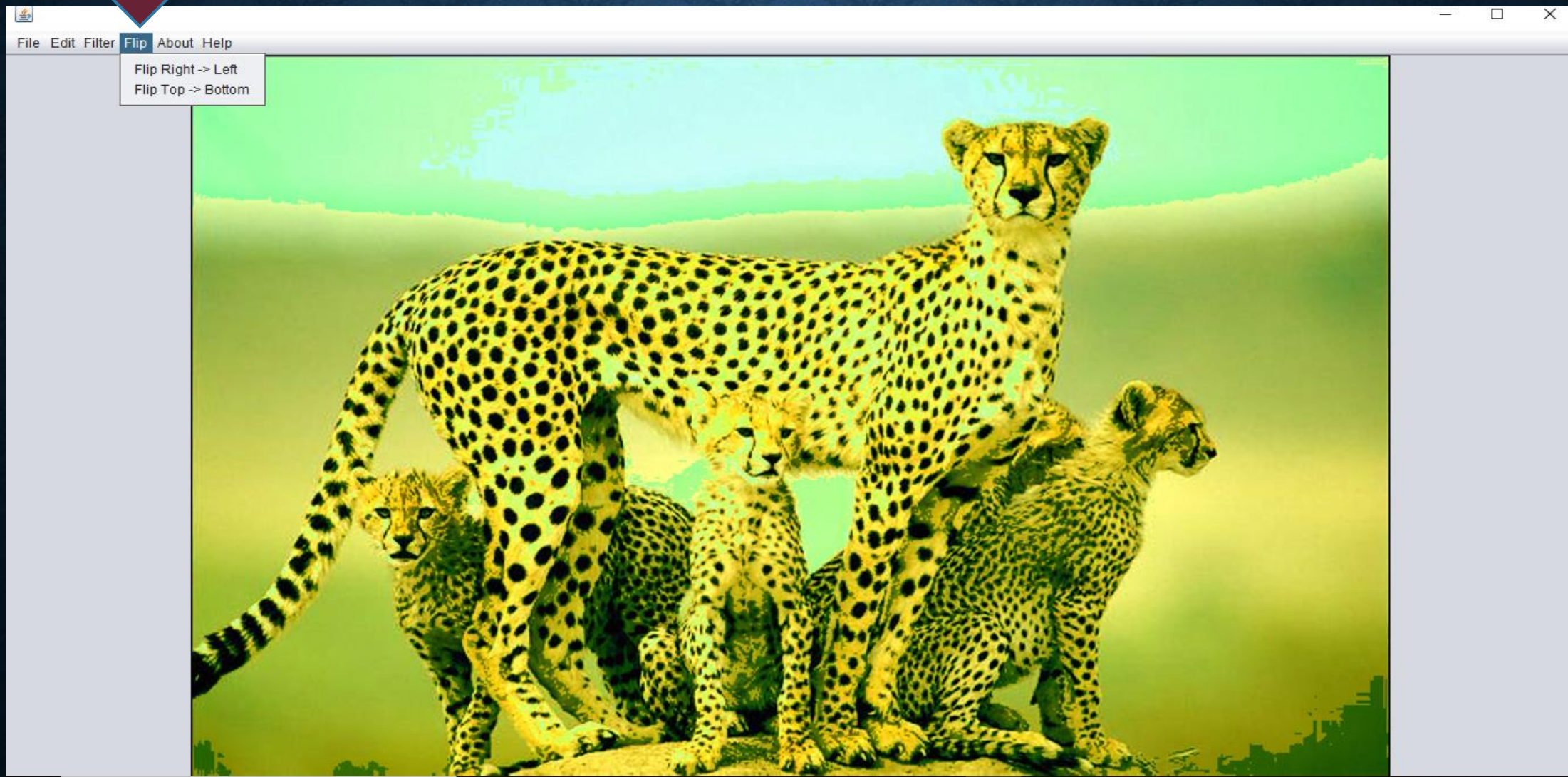


# YOU CAN APPLY SEVERAL FILTERS



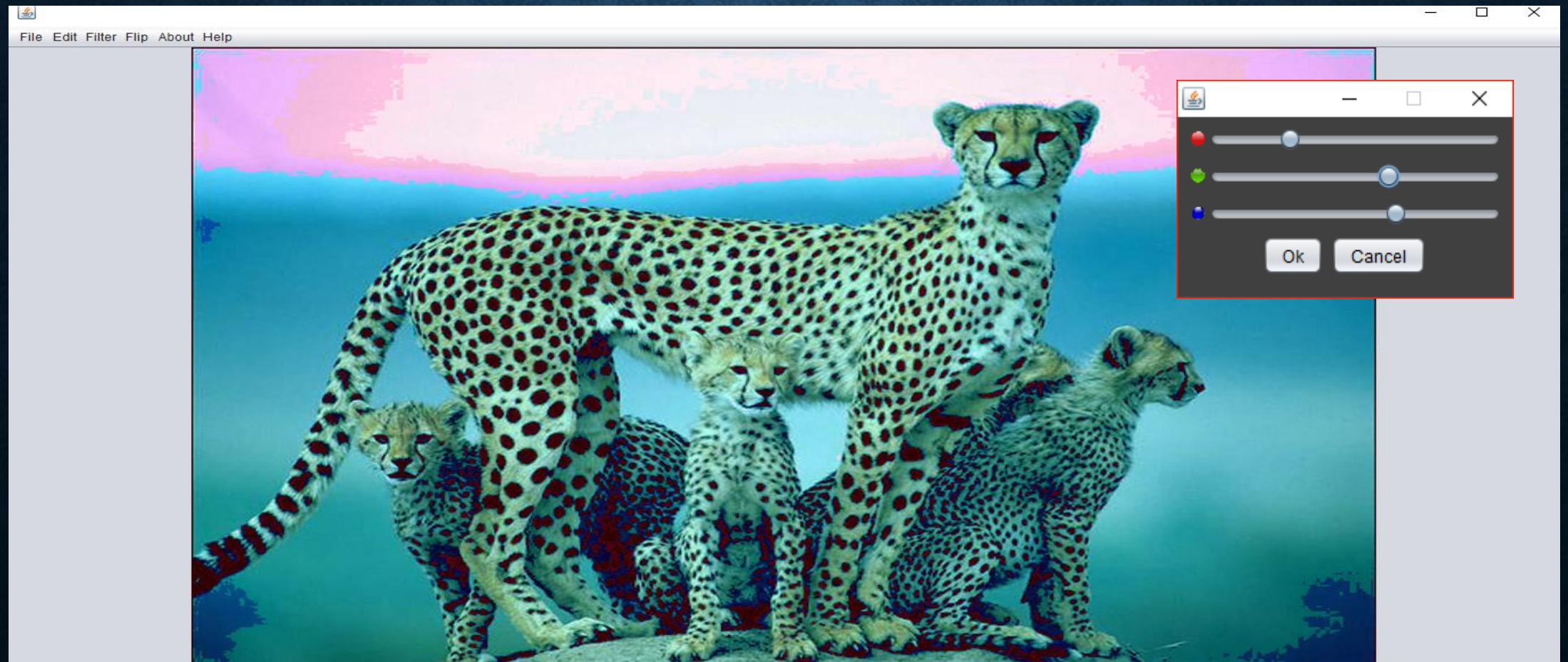


# YOU CAN ALSO FLIP



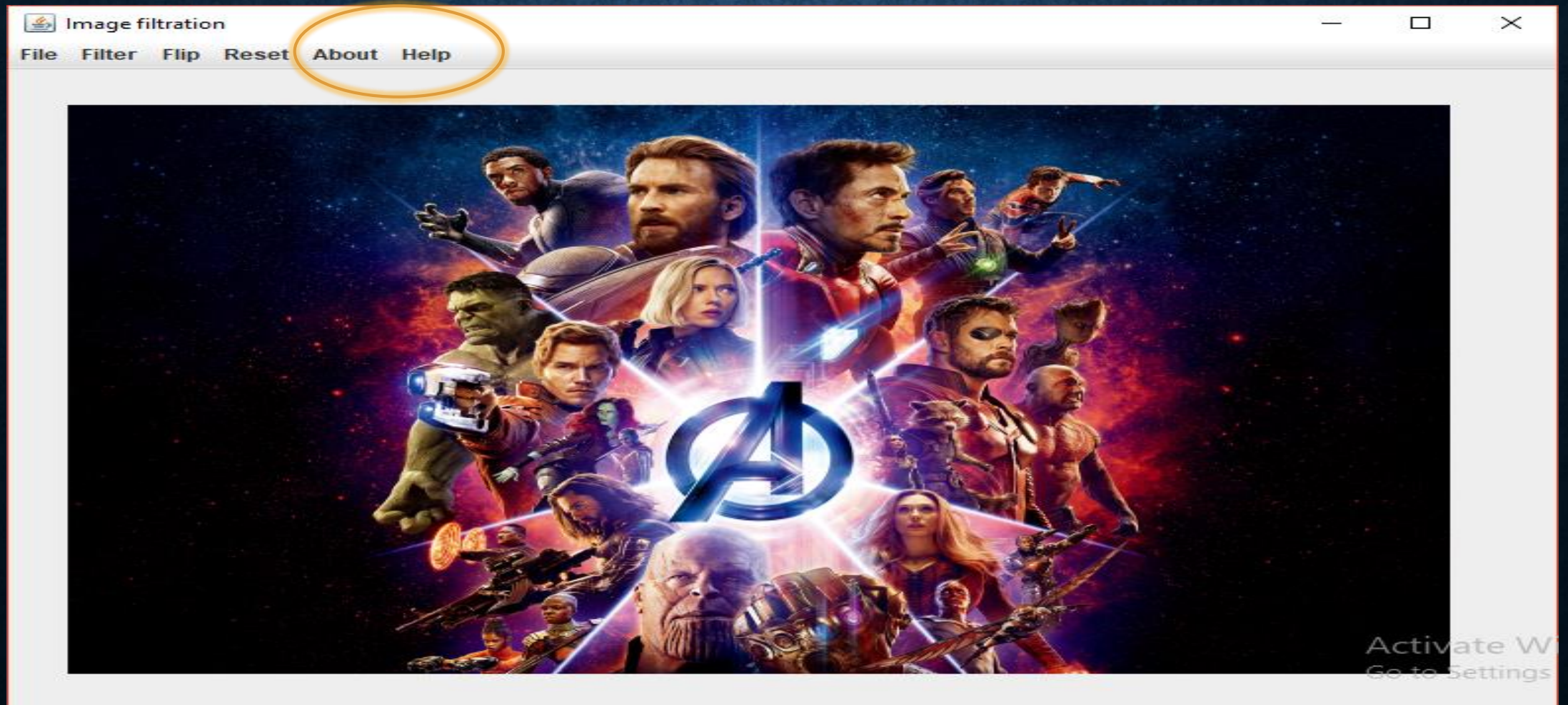


# YOU CAN ALSO CHANGE RGB VALUE



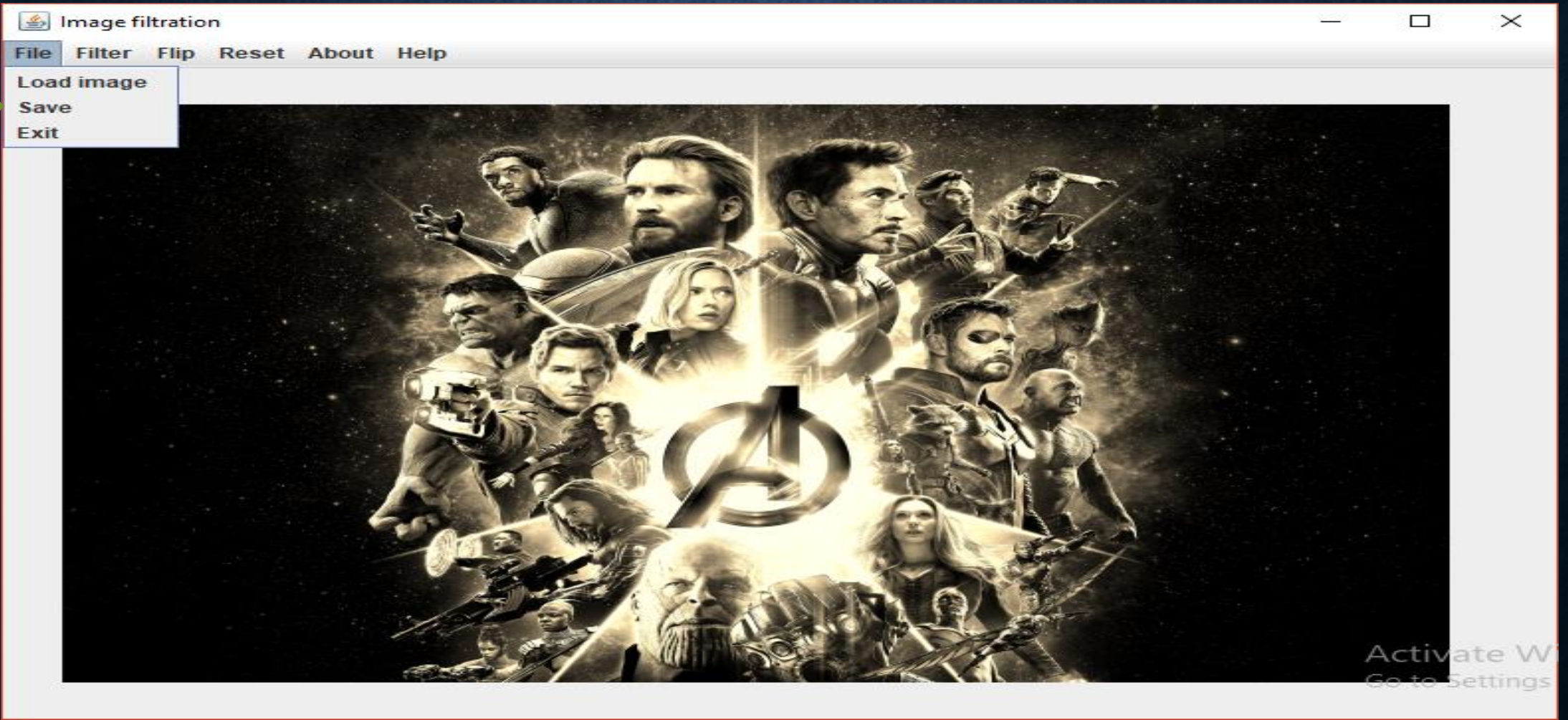


# WE WILL PROVIDE YOU GUIDE ,TOO



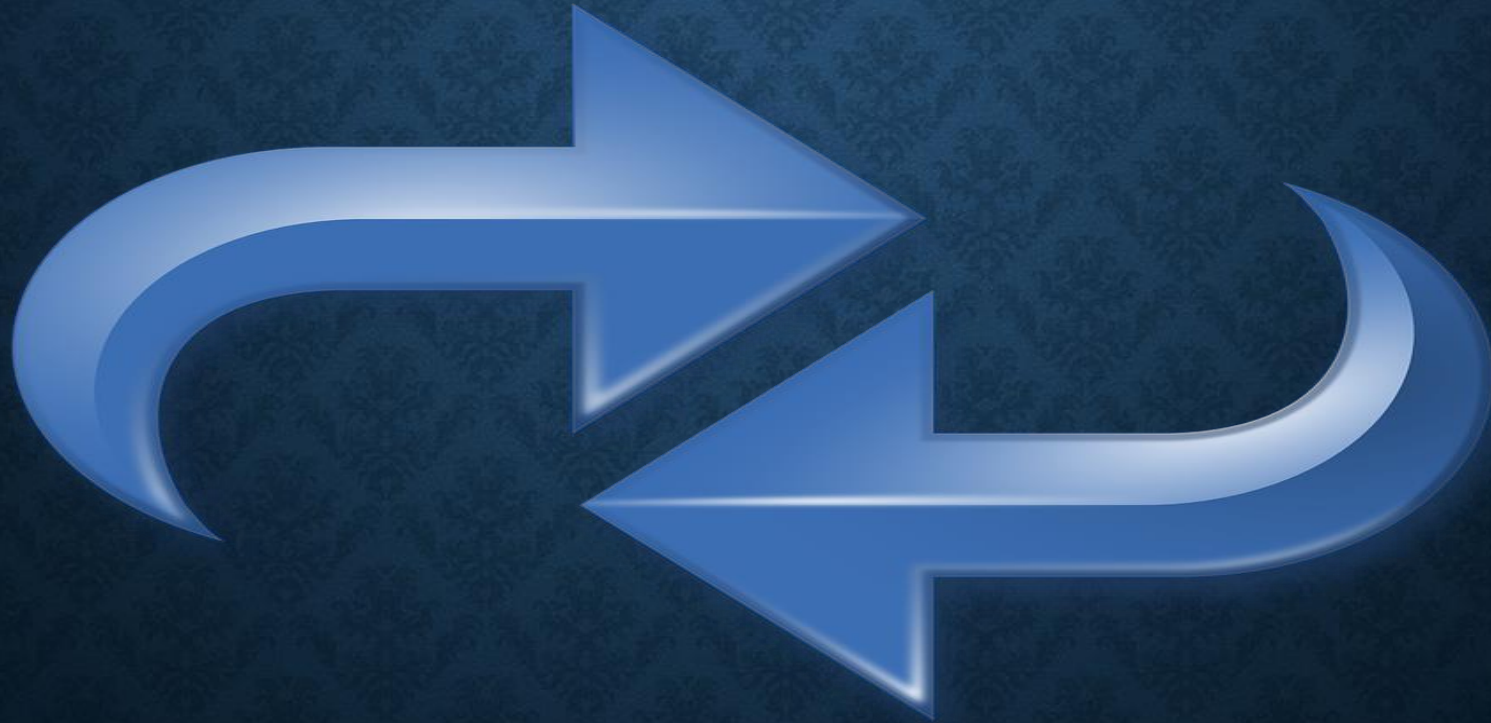


# YOU CAN SAVE IMAGE WHEREVER YOU LIKE

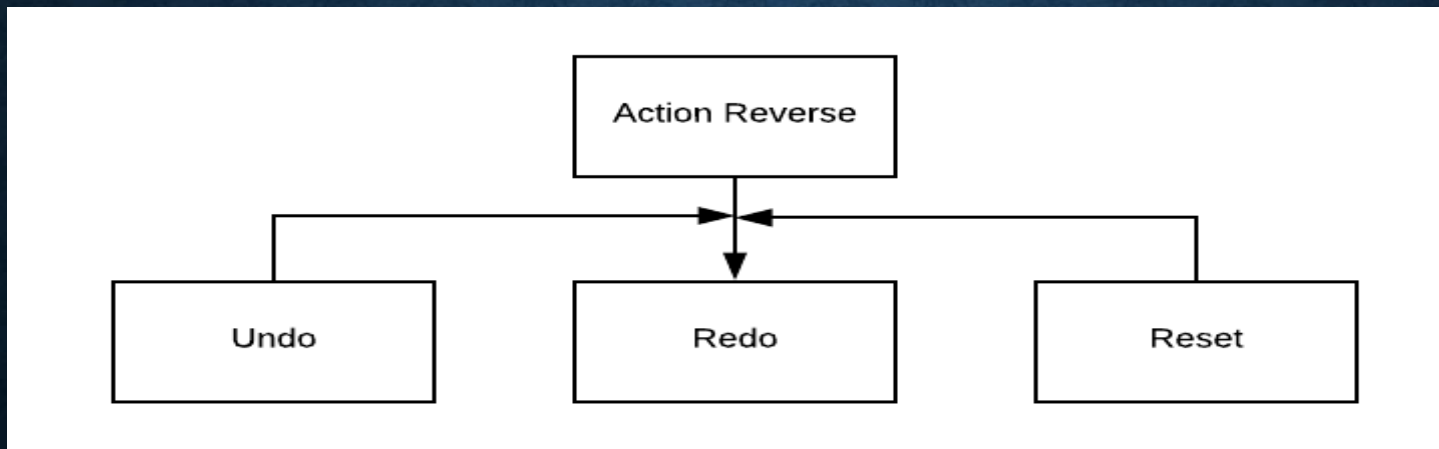




## **PHASE-II(RESET ACTIONS)**

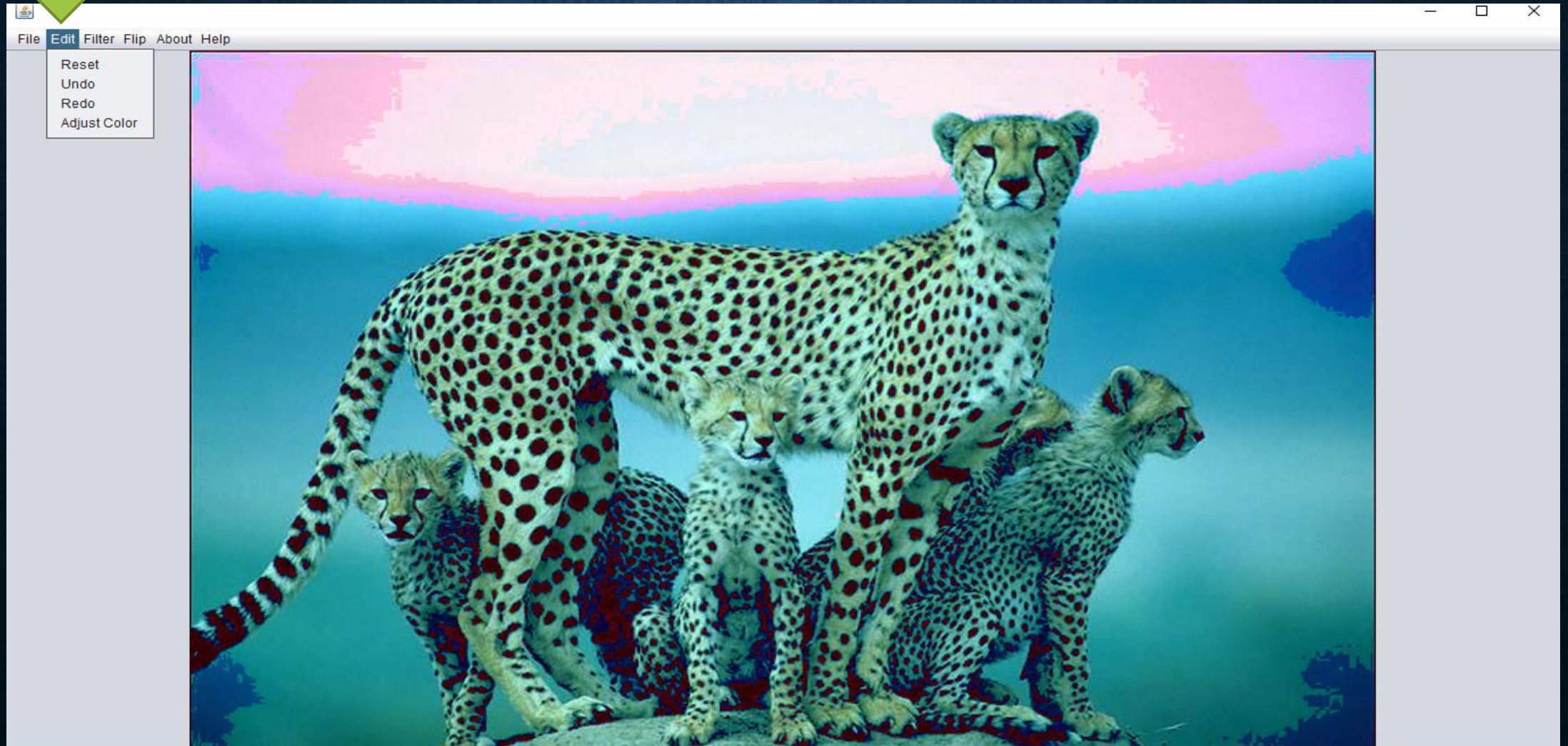


- In this phase , You can reverse actions which is performed on loaded image so if by mistakenly done any action on image than , you can easily resolve your problem by just reversing your action.
- So , we provide you 3 basic reversing actions as per below :



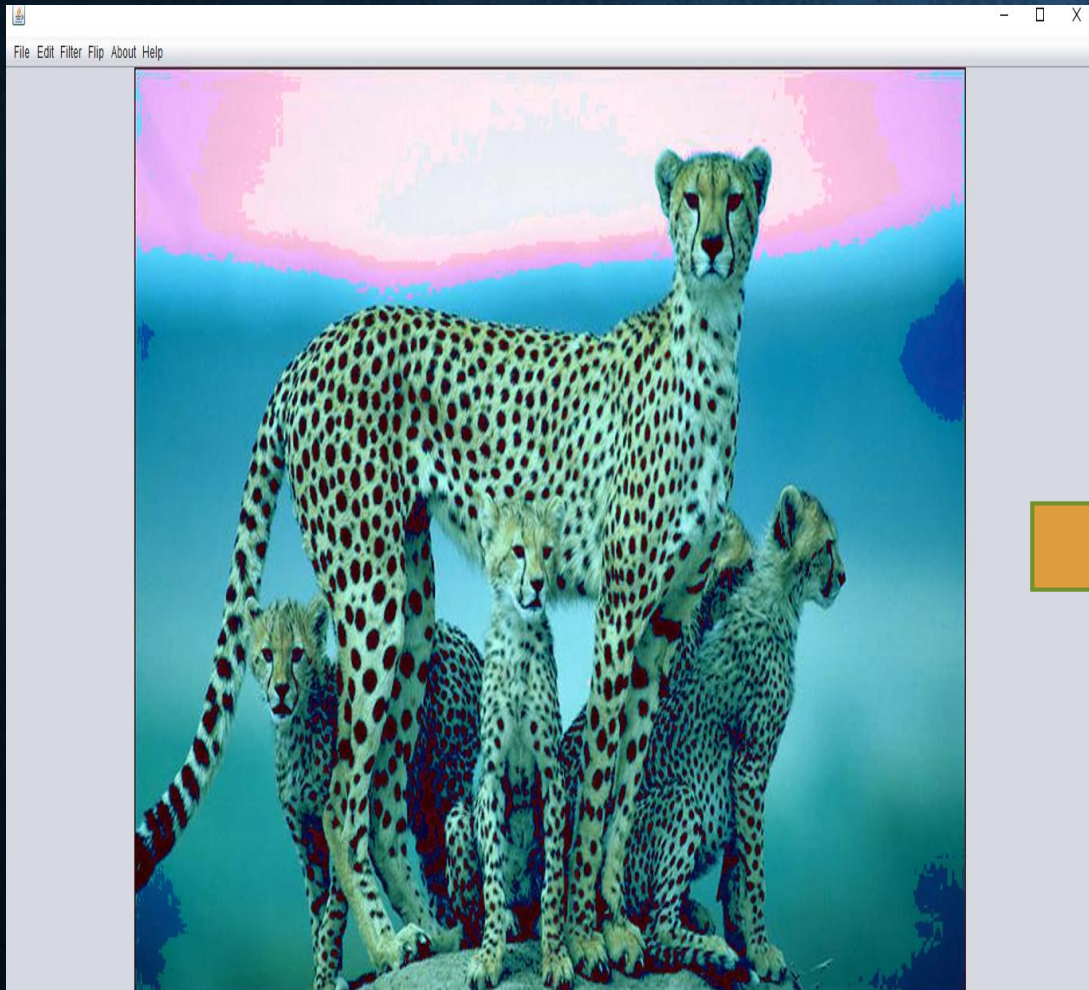


# EDIT MENU





# RESET / UNDO / REDO





# LIMITATIONS

- Our project is only compatible on windows but not for Android phones or Apple phones.
- We provide you only filtration option and flipping images so that this software not provides you much functionalities compare to other software.
- By resetting action , you will reach directly on that image that means if you load 2 images and then applying reset action so you jumped directly on 1<sup>st</sup> image .

# OUTCOME

- Many windows users have always trouble for not having System Generated Image Filtration , So they have to download explicitly another Software having Larger Size and also some are in pirated version So, We remove this bias.
- Our project will occupy less memory compare to other Image Processing Software So , All users are easily use this.
- In java, this kind of project is not so easy , So this project creates inspiration for others that in JAVA , you can do this kind of project not with too much functionalities but you can improve in JAVA field more compare to do normal problems.



# FUTURE ENHANCEMENT

- We provide you Object Detection and Recognition Both.
- Also made our project compatible on each and every platform.
- Also create Server in which you can easily store your images without taking trouble about memory efficiency.

