**CONCLUSION:**

In this paper, we proposed a comparative analysis of different variants of ResNet like ResNet-50, ResNet-101 and ResNet-152. All the networks are modified by the method of transfer learning by replacing the last three layers of the existing models. Then all are retrained for verifying whether they are suitable for brain tumor detection. From the obtained results, we can conclude that ResNet-152 retrained model outperforms all the others. These networks can be used for automating the brain tumor detection process.