

## Questions and Answers

**Question 2.1: First, list what diversity you have obtained, and next the ways in which you have obtained the variety (a line for each image).**

We have tried to achieve different types of variations in the images. First was different people; We collected multiple images of all group members. Also, we tried to have more than one face in some of the images. Another variety in our images was the resolution of the images as mentioned in the Task01.pdf; We started from  $24 \times 24$  size of the image, but as we can clearly observe that such  $24 \times 24$  image barely has any details in it, so not much effect of gaussian blur is seen in smaller size images. But as we proceed to higher size images, we can clearly observe the effects of the bounding box. The maximum image size we used is of  $1280 \times 1048$  size. We have also taken images of different lighting conditions.

**Question 3.1: Where, if at all, does DeepFace use ideas like these in recognizing faces? Explain briefly.**

From the knowledge we have gained from chatgpt, we can say that the DeepFace uses the edge and contour detection to detect the presence of a face in the image. It is used to extract features from the images which then are fed in the DeepFace's neural network.