**ELABORATION OF PROBLEM**

Our problem is to train a model to detect skin cancerous lesions and to further classify them into types. The problem is broken into sub problems listed below:

1. **Image Acquisition**  
   Data is acquired from ISIC [ref no] which contains 8000 images on which the model is trained. These are skin melanoma images.
2. **Image Pre-processing**Dataset acquired consists of images of differing dimensions so all of them are resized to have the same dimensions 500\*500
3. **Image Segmentation**The lesion in the images is segmented from the surrounding skin. This is done using thresholding since there is a clear distinction of color between the lesion and the surrounding skin
4. **Convolution Neural Network**Model is built using CNN which is trained on the processed dataset. The trained model than classifies the images as ‘Benign’ or ‘Malignant’.
5. **Evaluation**Several measurements are computed to evaluate the model including accuracy, precison.