## **PROBLEM STATEMENT**

Task 2: You are given a Covid-19 image dataset.

## Task 2 completion guideline:

- You have to implement KNN on this dataset
- Find optimal K value
- Find highest accuracy possible
- Experiment with different distance metrics (at least the number of metrics discussed in the session) (better if you can find and implement additional metrics by yourself).
- Experiment with different seed values.
- Implement GridsearchCV
- Write a short discussion on your experiments and results. Discuss the strengths and weaknesses of KNN.

## Dataset properties:

- 2 classes
- Infected class and Normal class
- Number of samples in Infected class: 50
- Number of samples in Normal class: 50
- Total samples: 100
- Data.npy contains images
- Labels.npy contains associated labels