Steps for running code:

1. Extract the zip folder and use that as a working directory.
2. Add dataset folder named "dataset" containing train, valid and test subfolders.
3. Place the dataset folder with the code files provided.

**Part1:**

run this command in the terminal:

*python3 part1.py*

* script will automatically start creating segmentation maps from "selected\_ds" folder which contains 9 images from test folder.

**Part2:**

run this command in the terminal:

*python3 part2.py*

script will load image from "selceted\_ds" folder and ask for user input.

* Click on image to draw foreground mask/scribble on image with the help of segmentation mask provided.
* After drawing mask press 'q' and script will ask for background region.
* Draw a scribble to represent background region (Look in report for example).
* After drawing background scribble press ‘q’ again.
* Code will generate segmentation mask in few seconds.

**Part3:**

Run this command in terminal:

*python3 Pytorch-UNet/train.py*

Script will train the U-net model and perform evaluation on test data.

To obtain dice score reported in report (0.78) use weights provided in folder “best\_ckpt”. Use this command:

*python3 Pytorch-UNet/train.py --pretrain True*