1. Out of 3
    a. 0.5 marks -> splitting into train-val
    b. 2 marks (0.5 each for method, 0.5 in total if all answers are individually correct) -> prediction accuracy for each validation
    c. 0.5 mark -> taking the mean accuracy
2. Out of 3
    a. 1 mark -> for calculating the correct objective function
    b. 2 marks (1 mark each) -> for calculating the correct silhouette for A and B
3. Out of 3
    a. 1 mark -> calculating the covariance matrix (allow both division by N or (N-1))
    b. 1 mark -> calculating the eigenvalue
    c. 0.5 marks -> why use higher eigenvalue/mentioning PCA reasoning i.e maximizing variance
    d. 0.5 marks -> slope and answer
4. Out of 3
    a. 1 mark -> explanation as to why orthogonal
    b. 1 mark -> solving the equations
    c. 1 mark -> providing 1 possible answer
5. Out of 2
    a. 1 mark -> calculating distance
    b. 0.5 marks -> x and y calculation
    c. 0.5 marks -> bandwidth
6. Out of 3
    a. 1 mark -> calculating correct dist (at least 1 point) (eps)
    b. 1.5 mark -> labeling whether core, noise, border (min_pts, eps)
    c. 0.5 mark -> for dense clusters and outliers
7. Out of 3
    a. 0.5 marks -> correct assumption (The dataset follows Gaussian Distribution)
    b. 1.5/2 marks -> finding Mahalanobis distance for all points (1 for covariance matrix, 1 for Mahalanobis)
    c. 1/1 marks -> threshold
8. Out of 3
    a. 1 mark -> Correct Assumptions (The dataset follows Gaussian Distribution)
    b. 1.5 marks -> Finding Mahalanobis distance for all points(1 for mahalanobis distance and 0.5 for correct covariance matrix)
    c. 0.5 marks -> Correct threshold that separates B,H from I