ML Assignment 5 - Dimension Reduction

Task 1. - Implement PCA for dimension reduction. If we want to capture 99% of variance, how many principal components do we need? Complete the following table.

Principle component number	% Variance	% Cumulative Variance
1	59.25	59.25
2	24.12	83.37
3	9.15	92.53
4	2.3	94.83
5	1.45	96.29
6	0.52	96.81
7	0.32	97.13
8	0.31	97.44
9	0.26	97.71
10	0.23	97.94
11	0.22	98.16
12	0.21	98.36
13	0.16	98.53
14	0.13	98.66
15	0.12	98.77
16	0.11	98.89
17	0.11	99.00