2).1)

By the graph we can interpret that the singular value in beginning are much more significant than those at the end.

2).2) To verify weather wheather U and Vh matrix are orthonormal or not we will do:

$$U^T U = I$$
$$\& \quad V_h^T V_h = I$$

Since both conditions will be satisfied based on that we can conclude that U and Vh are orthonormal.