Math 160 - Project 1

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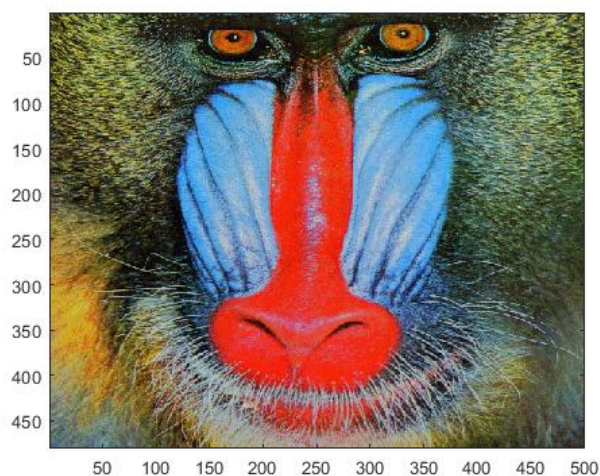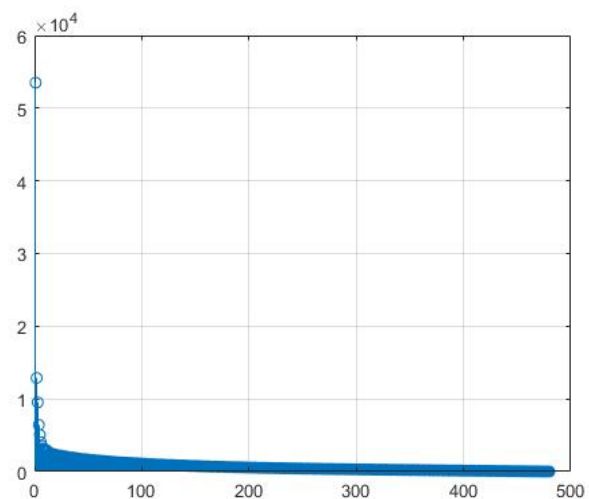
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Problem No.2

Using Plurity metho...

Problem No.3

Problem No.4

(a) *mandrill* image   (b) distribution of singular values

Figure 1: The image (left) along with the distribution of its singular values (right).
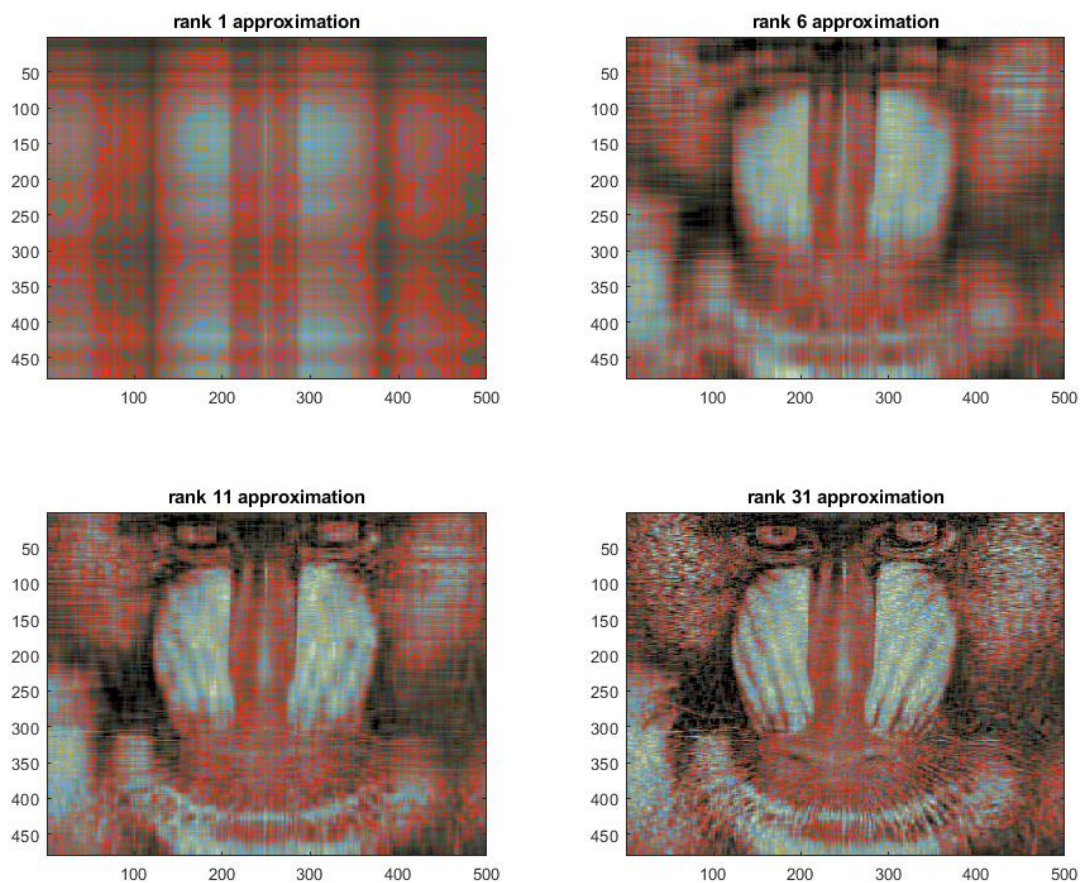

Figure 2: Four different approximation for the image based on the rank.

	Absolute Error	Relative Error
Rank 1 approximation	12891.1649	$1.2699e^{-15}$
Rank 6 approximation	3537.8836	$6.4268e^{-16}$
Rank 11 approximation	2820.0648	$6.4502e^{-16}$
Rank 31 approximation	1985.461	$4.5808e^{-16}$

Figure 3: The absolute error (norm) along with relative error of the approximation of image based of the rank.