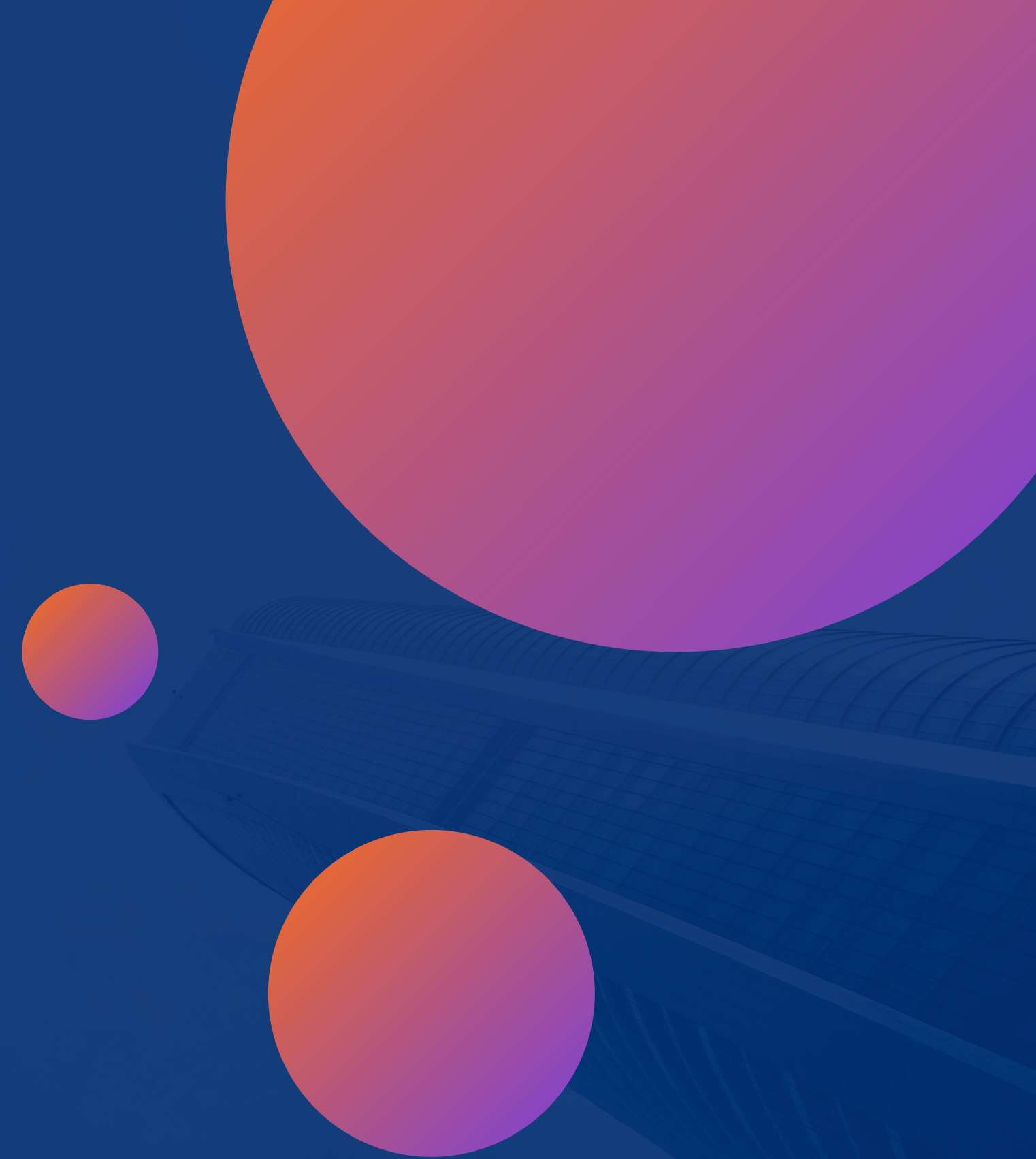


# Image Compression

Group 16



# Problem Statement

Compressing an image while keeping an appropriate balance between compression ratio and quality.

We will be doing so with the help of Singular Value Decomposition method.



# RGB Image Compression

01

Taking image as input and then separating RGB components

02

QR decomposition is applied to find eigenvectors and

03

Calling SVD function to perform and then reconstructing the matrix

04

Calculation of MSE.



Taking image as  
input and  
separating its  
RGB components



Finding  
eigenvalues and  
eigenvectors  
using QR  
decomposition



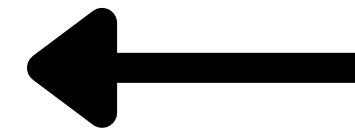
Performing SVD  
on component  
matrices



Output:  
Compressed  
Image



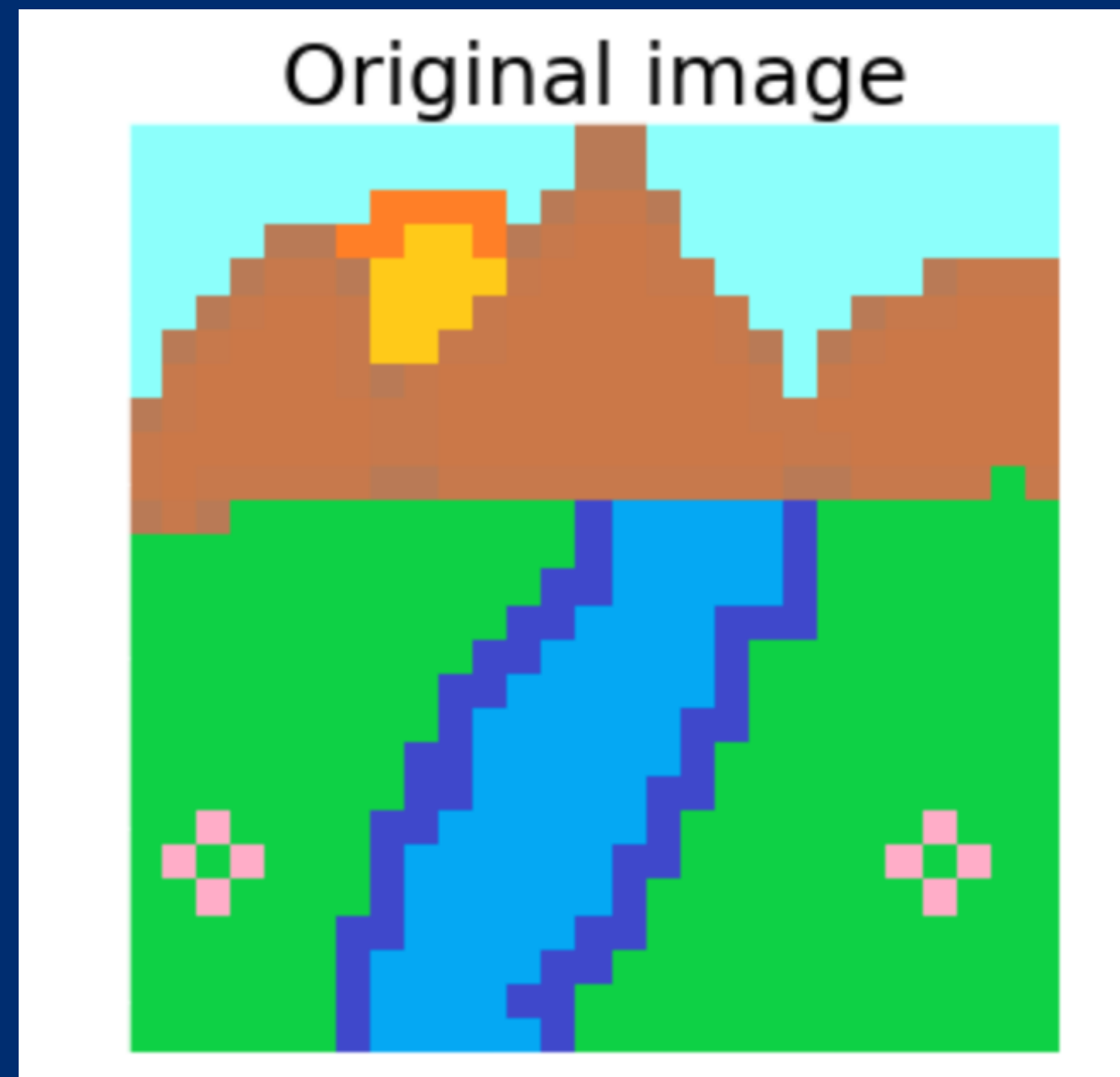
Regenerating  
matrix  
components and  
combining them  
& calculation of  
MSE



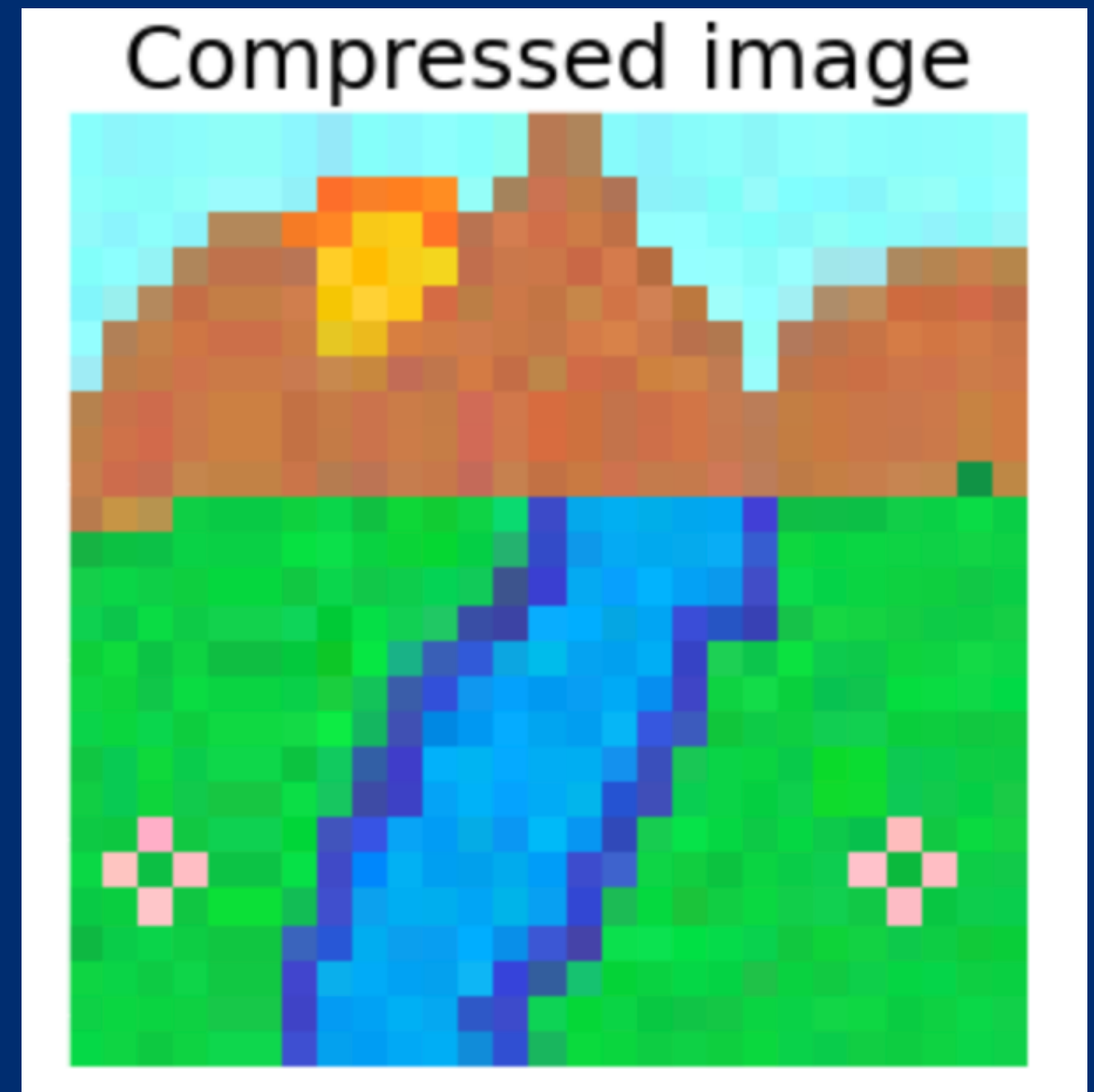
Using k values  
and removing  
values greater  
than k



# Before



# After







# Thank You

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