

## Assignment- 5

1. What are pixel-oriented visualization techniques, and how do they differ from other visualization approaches? Provide examples of situations where pixel-oriented techniques are most effective.
2. Explain geometric projection visualization techniques and their significance in representing spatial data. How do these techniques handle complex geometric shapes and perspectives?
3. Discuss icon-based visualization techniques and their applications in representing categorical data or discrete elements. How do icons enhance the understanding of data patterns and relationships?
4. Implement a pixel-oriented visualization of an image using Python's Matplotlib library, representing each pixel's color intensity and position in a scatter plot or heatmap.
5. Develop a Python script using Plotly or Bokeh to create interactive geometric projection visualizations of 3D shapes, allowing users to manipulate projection angles and view shapes from different perspectives.