Q1. Choices for increasing comparison between different figures on the same graph:

- Adjusting color schemes for better contrast.

- Utilizing different line styles or markers.

- Adding annotations or labels to highlight key points.

- Implementing transparency for overlapping elements.

Q2. Benefit of compound interest over a higher rate of interest without compounding:

- Compound interest allows interest to be calculated on both the initial principal and accumulated interest, leading to exponential growth over time. This results in higher returns compared to simple interest.

Q3. Histogram and NumPy method for creating it:

- A histogram is a graphical representation of the distribution of a dataset.

- NumPy method: `NumPy.histogram(data, bins)`

Q4. Changing aspect ratios between X and Y axes:

- Use `plt.axis('equal')` to set equal aspect ratios.

Q5. Types of array multiplication in NumPy:

- Dot Product: `NumPy.dot(array1, array2)` or `array1.dot(array2)`

- Outer Product: `NumPy.outer(array1, array2)`

- Regular Multiplication: `array1 \* array2` (element-wise multiplication)

Q6. NumPy function for measuring monthly mortgage payment:

- The NumPy function `NumPy.pmt(rate, nper, pv)` can be used to calculate the monthly mortgage payment.

Q7. Storing string data in NumPy arrays:

- Yes, string data can be stored in NumPy arrays.

- Restriction: All elements in a NumPy array must have the same length, so strings are typically padded with spaces to ensure uniform length.