Q1. If you have any, what are your choices for increasing the comparison between different figures on the same graph?

Ans: Pie charts are best to use when you are trying to compare parts of a whole. They do not show changes over time

Q2. Can you explain the benefit of compound interest over a higher rate of interest that does not compound after reading this chapter?

Ans: Compound interest makes your money grow faster because interest is calculated on the accumulated interest over time as well as on your original principal. Compounding can create a snowball effect, as the original investments plus the income earned from those investments grow together.

Q3. What is a histogram, exactly? Name a numpy method for creating such a graph.

Ans: A histogram is a graphical representation that organizes a group of data points into user-specified ranges. Numpy.histogram() is used to create histogram.

Q4. If necessary, how do you change the aspect ratios between the X and Y axes?

Ans: set\_aspect() function. If we use "equal" as an aspect ratio in the function, we get a plot with the same scaling from data points to plot units for X-axis and Y-axis. It sets both X-axis and Y-axis to have the same range.

Q5. Compare and contrast the three types of array multiplication between two numpy arrays: dot product, outer product, and regular multiplication of two numpy arrays.

Ans: np. dot is the dot product of two matrices. Whereas np. multiply does an element-wise multiplication of two matrices.

Q6. Before you buy a home, which numpy function will you use to measure your monthly mortgage payment?

Ans: In order to calculate the monthly mortgage payment, you will use the numpy function . pmt(rate, nper, pv) where: rate = The periodic (monthly) interest rate. nper = The number of payment periods (months) in the lifespan of the mortgage loan.

Q7. Can string data be stored in numpy arrays? If so, list at least one restriction that applies to this data.

Ans: Yes, we can store string data in numpy array.