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

Answer: If we have choice for trying to keep the comparison between different figures let’s say annual profit for different years, we can use profit section on y axis for different years and keep the values of different years on x axis for year to year comparison. This way will definitely help a lot in comparison.

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

Answer: Compound interest helps in making your final amount grow as interest is calculated on the accumulated interest over time as well as the original principal.

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

Answer: Histogram is the accurate graphical representation to show your data into different categories based on numerical data distribution. We simply use numpy.histogram() function to create a histogram for sets of X and Y axis values with numpy module.

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

Ans: We can simply use matplotlib.set\_aspect() function, add required parameters/values for X and Y axis and get the required aspect ratios for any image/plot you want to.

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.

Answer: np.dot() between 2 arrays will give a scalar/ array as a result which is completely dependent .Outer computes the outer product of two vectors and regular multiplication of 2 vectors is computed by numpy.matmul() function.

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

Answer: For calculating the monthly mortage payment , we will use numpy.pmt() function with parameters as rate, number of payments made over course of few years, total value of mortgage loan.

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

Answer : Yes we can store string data in numpy arrays, but the only limitation is that all the rest of the values in this array need to be string data type only and no other data type values are allowed in here.