1. **What makes NumPy.shape() different from NumPy.size()?**

   ANS: I noticed that some numpy operations take an argument called `shape`, such as `np.zeros`, whereas some others take an argument called `size`, such as `np.random.randint`. To me, those arguments have the same function and the fact that they have different names is a bit confusing. Actually, `size` seems a bit off since it really specifies the `.shape` of the output.

2. **In NumPy, describe the idea of broadcasting.**

   ANS: The term broadcasting refers to the ability of NumPy to treat arrays of different shapes during arithmetic operations. Arithmetic operations on arrays are usually done on corresponding elements. If two arrays are of exactly the same shape, then these operations are smoothly performed.

3. **What makes Python better than other libraries for numerical computation?**

   ANS: It can handle data sets that are much bigger than what can fit into memory. Python is also quite good at this, with its pandas and NumPy libraries able to do many of the same things including some which R cannot do.

4. **How does NumPy deal with files?**

   ANS: NumPy introduces a simple file format for ndarray objects. This . npy file stores data, shape, dtype and other information required to reconstruct the ndarray in a disk file such that the array is correctly retrieved even if the file is on another machine with different architecture.

5. **Mention the importance of NumPy.empty().**
   ANS: The numpy module of Python provides a function called numpy. empty(). This function is used to create an array without initializing the entries of given shape and type.