Homework 4

Due 4/9/2018

1. If you have data that should not be lost on disk failure, and the data are write intensive, how would you store the data? (10 points)

2. When is it preferable to use a dense index rather than a sparse index? (10 points)

3. Construct a B +-tree for the following set of key values: (1, 3, 5, 7, 12, 17, 19, 24, 29, 31)
   Assume that the tree is initially empty and values are added in ascending order.
   Construct B +-trees for the cases where the number of pointers that will fit in one node is four.
   (10 points)

4. In 5 sentences or less describe the research option you chose and what type of research you plan conduct for the research phase of the project. Be specific. (20 points)