**Tutorial 3**

**GC 312**

**Q1:**

A PARTS file with Part# as hash key includes records with the following Part# values: 2369, 3760, 4692, 4871, 5659, 1821, 1074, 7115. The file uses 6 buckets, numbered 0 to 5. Each bucket is one disk block and holds two records. Load these records into the file in the given order using the hash function h(K)=K mod 6.

**Q2:**

A PARTS file with Part# as key field includes records with the following Part# values: 23, 65, 37, 60, 46, 92, 48, 71, 94 and 100. Suppose the search field values are inserted in the given order in a B + -tree of order p=4; show how the tree will expand and what the final tree looks like.