1. Insert the following values into an initially empty B+ tree with parameter \( n = 4 \).

\[ 12, 22, 5, 30, 25, 17, 33, 20, 27, 7, 35, 4, 31, 28. \]

2. 551: Repeat the previous question with \( n = 5 \).

3. For each of the following relations and sets of functional dependencies, convert the relation into BCNF (if it is not already). Be sure to identify all keys.

   (a) relation \( ABCDE \)
   functional dependencies \( A \rightarrow B, B \rightarrow C, C \rightarrow E, E \rightarrow A \)

   (b) relation \( ABCDE \)
   functional dependencies \( C \rightarrow BDE, BD \rightarrow CA \)

   (c) relation \( ABCDEF \)
   functional dependencies \( A \rightarrow B, CD \rightarrow AB, E \rightarrow DF \)

simple grading scheme
1. 10 points
2. 10 points
3. 15 points

total: 25/35 points