Binary Search Tree

1. **Implement the API using Binary Search Tree:** Implement the following API using Binary Search Tree.

void put(Key key, Value val) 🡪

Value get(Key k) 🡪

Key min() 🡪

Key max() 🡪

Key floor(Key key) 🡪

Key ceiling(Key key)

Key select(int k)

Iterable<Key> **keys**(Key lo, Key hi)

void delete(Key key) 🡪

void deleteMax() 🡪

void deleteMin() 🡪

**Key Type:**

Key will be an object of type book containing following attributes

Name

Author

price

**Note:**

Write your code in BST.java. Unit testing will be done on your BST, so strictly follow the API.