```
1. public class HCCVertex extends Vertex<IntWritable, IntWritable> {
2.
3.
      @Override
4.
      public void compute(Iterable<IntWritable> messageValues, int superstepNo) {
5.
        if (superstepNo == 1) {
6.
           setValue(new IntWritable(getId()));
7.
           sendMessages(getNeighborIds(), getValue());
8.
        } else {
           int minValue = getValue().value();
9.
10.
           for (IntWritable message : messageValues) {
              if (message.value() < minValue) {
11.
12.
                 minValue = message.value();
13.
14.
15.
           if (minValue < getValue().getValue()) {
16.
              setValue(new IntWritable(minValue));
17.
              sendMessages(getNeighborIds(), getValue());
18.
            } else {
19.
              voteToHalt();
20.
21.
22.
23.}
```