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Cayla D. McBee* (cmcbee@providence.edu). *Prime Labelings of Hypercube Graphs*. Preliminary report.

A simple graph on n vertices has a prime labeling if and only if there exists a labeling of the vertices by the numbers $1, 2, 3, \dots, n$ such that any two adjacent vertices have labels that are relatively prime. There are many problems related to prime labeling that are well suited for collaborations with undergraduate students. This talk looks at the problem of determining the values of k for which the hypercube graph, Q_k , is prime and presents some recent work with students. (Received September 13, 2016)