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It is currently unknown whether all (not necessarily perfect) matchings in hypercubes are contained in a 2-factor. Motivated by this question, we discuss conditions under which a subgraph of a regular bipartite graph extends to a 2-factor. We discuss two results closely related to previous work done by other authors, and apply them to show that every matching in Q_5 is contained in a 2-factor. (Received September 10, 2010)