Samplemax

Exercise

Given n parties P_1,P_2,\ldots,P_n with each party entering a list of m values $V_i=(v_{i1},v_{i2},\ldots,v_{im})$ that sum up to a constant value $B=\sum_{j=1}^m v_{ij}$ (for all parties i), find the maximal value in each of those lists - without revealing any information on the values V_i to party P_k for $i\neq k$.