Distributed Hash Table (DHT)

• DHT: distributed P2P database
  – Distributed (why?)
  – Each node knows little information
    • Low computational/memory overhead
  – Reliable
• database has \((\text{key}, \text{value})\) pairs (i.e., a hash table);
  – E.g., key: ss number; value: human name
  – E.g., key: movie name; value: IP address
  – E.g., key: skype name; value: IP address
• peers \textbf{query} DB with key
  – DB returns values that match the key
• peers can also \textbf{insert} \((\text{key}, \text{value})\) peers