Apache Spark and MapReduce are both widely used for distributed data processing, yet they each have distinct characteristics that make them suitable for different scenarios.

Discuss a specific use case where Apache Spark's in-memory computing and DAG execution model would be more advantageous than MapReduce's disk-based storage and two-stage execution. Explain the technical aspects that contribute to this advantage.

Conversely, identify a scenario where MapReduce might be a preferable solution over Apache Spark. What are the considerations that might lead to this choice, and how do the underlying architectures of both systems influence this decision?

Please share your insights and support your viewpoints with examples or references.