1)Explain the core changes made in Hadoop 2.x?

Hadoop 2.x - hadoop decouples the responsibilities into different components.

This is done by Yet Another Resource Manager

By decoupling component’s responsibilities, it supports multiple namespace, Multi-tenancy, Higher Availability and Higher Scalability.

Hadoop 2.x has following benefits:

1. Highly Availability.
2. Highly Scalability.
3. Supports Multiple Programming Models.
4. Supports Multi-Tenancy.
5. Supports Multiple Namespaces.
6. Improved Cluster Utilization.
7. Supports Horizontal Scalability.

2)Explain the difference between MapReduce 1 and MapReduce 2 / Yarn

Hadoop 1.x also called as hadoop 1 where HDFS (Resource management and scheduling) and Map Reduce(Programming Framework) hence non batch applications cannot be run on hadoop 1.

It can support only single name node. So it does no provide system availability and scalability.

MapReduce 2 (Hadoop 2) in this version of hadoop the resource management and scheduling tasks are separated from Map Reduce which is separated by Yet Another Resource Negotiator

The resource management and scheduling layer lies beneath the Map Reduce layer. It also provides high system availability and scalability as we can create redundant Name Nodes. The new feature of snapshot through which we can take backup of filesystems which helps disaster recovery.