**ProdduturuAneeshPavanHW17CS6001**

**Aneesh Pavan Prodduturu**

**Q: What is the copy reference method in Houdini SideFX, and what are its advantages?**

**A:**

* With the Copy Reference method, you can quickly copy geometry data in instances all over a scene. Instead of copying the real geometry data, this method makes a reference to the original geometry that can be moved, transformed, and rotated without copying the geometry data. This method is helpful for scenes with a lot of objects because it cuts down on the amount of data that needs to be saved and processed.
* There are many benefits to using copy reference method:
  + Geometry data is not duplicated, which saves memory.
  + Simplifies editing by automatically updating all instances if the original geometry is modified.
  + If the original geometry is changed, all copies are automatically updated. This makes editing easier.
  + Reusing existing geometry data makes it easier to handle big scenes.
* Here is an example of how to copy reference method looks:

