1. **What is the fundamental difference between how Java and C++ implement collections?**

When java goes to implement a collection, it has to go and cast it from the Object class.You can also not store primitives in a java collection, so that forces you to do an extra conversion from the primitive to the corresponding wrapper class. In C++, the collections are templates, so the compiler generates the code for the class with the data type you want and there is no casting or wrapper classes.

2. **What is the difference between a template and a class?**

A template allows you to write code for a class without specifying the data type right away, it is essentially the specifics for how to make a class.The class itself contains all the data members, but is inside the template.

3. **What are some of the drawbacks of templates?**

One drawback of templates is that each time a template is created, the compiler creates and compiles a separate version of the class. The compiler then has to recompile all of the class's methods each time it is instantiated. This makes the compile time longer and ends up creating a larger executable. Another drawback is that if you specify the data type, it is unrelated to any other data type that is also in that class and you can not cast one to another.

4. **What is an iterator?**

An iterator is a class that represents a current element of a collection and lets you step from one element to the next.