The program consists of 5 source files:

* Tree.java
* FruitTree.java
* DecidiousTree.java
* EvergreenTree.java
* FinalMain.java (holds the main() method)

The code lacks polish and some functionality due to time constraints, but I made an effort to implement the concept of inheritance and interfaces as planned. For demonstration purposes, I also implemented method overloading within classes (see DecidiousTree constructor methods), as well as method override from child classes (see *toString()* methods).

Another concept related to inheritance was the use of *instanceof* operator to verify class membership and also the use of casting - both in order to call methods specific to that class. (See function calls at the end of the main.)

For demonstration purposes, most methods print to stdout, while *harvestFruit()* method returns a String object. In a real-world implementation, this code would be more elaborate, returning objects and processing more complex behaviors.

Unfortunately, I did not have the time to implement additional functionality, such as the *grow()* method, which would increment the *age* field and use the *growthSpeed* attribute to change the *height* and *diameter* fields accordingly as the time progresses.

Sample output is shown on the next two pages.

Sample output:



