Problem A

The ArrayList implements List< > ,Collection< > ,Iterable< > , RandomAccess ,Cloneable
, and Serializable.
And it inherits from AbstractList< > .

Problem B

- The equals method takes an Employee argument instead of an Object argument. This can cause problems when comparing objects .

The hashCode() method was not overridden, which caused an output false. The role of the hashCode() method is to generate a unique integer value for each object. If we do not override this method, the default implementation from the Object class is used. This default implementation generates a hash code based on the memory address of the object. As a result, two logically equal objects, such as two Employee instances with the same name and salary, will likely have different hash codes.

Problem E

I -When the type D is a class and A, B, and C are interfaces :If D does not override the method and there is no conflict it inherits the implementation normally and D must override the method explicitly if there is ambiguity.

ii -When the type D is an interface . we can Provide its own default implementation of the method, explicitly choosing which one to use or providing a new implementation entirely.