

1A.

Objects are all around us. Anything can be thought of as an Object. An object is an instance of a class. An Object is a module that has both state and behaviour.

A Class is nothing but a blue print for creating different objects which defines the shape and nature of an object. Class is a term that describes a specification for a collection of objects with common properties. A Class is a Template for an object that defines a new data type.

2A.

Inheritance can be defined as the process where one object acquires the properties of another. With the use of inheritance the information is made manageable in a hierarchical order. A very important fact to remember is that Java only supports only single inheritance. This means that a class cannot extend more than one class.

3A.

Conversion from a number with a smaller range of magnitude (like int to long or long to float) is called widening. The goal of widening conversions is to produce no change in the magnitude of the number while preserving as much of the precision as possible. For example, converting the int 2147483647 to float produces 2.14748365e9 or 2,147,483,650. The difference is usually small, but it may be significant.

Conversely, conversion where there is the possibility of losing information about the magnitude of the number (like long to int or double to long) is called narrowing. With narrowing conversions, some information may be lost, but the nearest representation is found whenever possible. For example, converting the float 3.0e19 to long yields - 9223372036854775807, a very different number.

4A.

this() & super() is a keyword.

"this()" is used to invoke a constructor of a same class, its pointing the same class object. "super()" is used to invoke a super class constructor and accessing the super class constructor.