ABSTRACTION

A class which is declared with abstract keyword is called abstract class

It can have both abstract and non-abstract methods.

Abstraction is the process of hiding the implementation details and showing only functionality to the user.

It lets us focus what object does rather than how it does.

2 ways to achieve abstraction

:- abstract class

:- interface

Abstract class:- can have both abstract and non abstract methods. It needs to be extended and its method implemented. It cannot be instantiated. It can have constructors and static methods also

It can have final methods which will force subclass not to change the body of the method.

Abstract class Shape{

Abstract int area(){}

}

Class square extends Shape{

Int area(int r){

Return r\*r;

}

Shape obj = new square();

Obj.area(2);

INTERFACE

An interface in java is the blueprint of a class. It has static constants and abstract methods.

By interface we can support the functionality of multiple inheritance

In case of interface multiple inheritance is supported because methods are not declared because they are abstract therefore they have to be defined and there is no ambiguity.

Members of interface are public by default.

Abstract class achieves partial abstraction (0% to 100%)

Interface achieves fully abstraction (100%)