

what is an interface?

→ An interface is a mechanism that is used to achieve complete abstraction. It is basically a kind of class that contains only constants and abstract methods.

which modifiers are allowed for methods in an interface?  
only abstract and public modifiers are allowed for methods in interface.

what is the use of interface?

- ① An interface is used to achieve complete abstraction.
- ② by using interface is the best way to expose our project's API to some other project.
- ③ programmers use interface to customise features of software differently for different objects.
- ④ By using interface, we can achieve functionality of multiple inheritance.

what is the difference between abstract class and interface?

Abstract class

(1) An abstract class can have abstract and non abstract methods.

Interface

An interface can only have abstract methods. Since java8 it can have default and static methods.

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| (2) An abstract class does not support multiple inheritance.                   | An interface supports multiple inheritance.                    |
| (3) An abstract class can have final, non-final, static, non-static variables. | An interface has only final and static variables.              |
| (4) abstract class can provide the implementation of interface.                | interface cannot provide the implementation of abstract class. |
| (5) abstract class can extend another class and implement multiple interfaces. | interface can extend another interface only.                   |
| (6) To declare abstract class we use abstract keyword.                         | Interface keyword is used to declare interface.                |
| (7) abstract class can be extended by using extend keyword.                    | interface can be implemented by using implement keyword.       |
| (8) abstract class can have class members like private, protected, etc.        | Members of interface are public by default.                    |