**Abstract Keyword in java**

***abstract*** keyword can be used with

* **Class**
* **Method**

**Abstract class**

* if ***abstract*** keyword is used before class keyword then we can't create an object of abstract class instead you have to inherit it.
* An abstract class can have both methods i.e. **abstract methods and simple/regular methods or any one.**

Example

**abstract class A**

**{**

**abstract void input();**

**void output();**

**{**

**System.out.println("This is regular method");**

**}**

**}**

**Abstract method**

A method which is declared with abstract keyword and doesn't have definition/implementation/body.

Example

**abstract void input();**

If a method of a class is abstract then the class must be declared abstract too, compulsarily.

Child class inheriting the abstract parent class then it should provide implementation/body to all the abstract methods of parent class by overriding. If not then child class will become abstract child class.

Example

**abstract class A**

**{**

**abstract void input();**

**void output();**

**{**

**System.out.println("This is regular method of class A");**

**}**

**}**

**class B extends A**

**{**

**void input()**

**{**

**System.out.println("This is overriden method of class A");**

**}**

**}**

Now, let us suppose class B did not provide implementation/body of class A abstract method then class B will be abstract automatically and we will have to write "abstract class B extends A" and child class of B will override all the abstract methods of class A and B.

Example

**abstract class A**

**{**

**abstract void input();**

**}**

**abstract class B extends A**

**{**

**abstract void get();**

**void disp()**

**{**

**System.out.println("This is method of class B");**

**}**

**}**

**class C extends B**

**{**

**void input()**

**{**

**System.out.println("This is overriden method of class A");**

**}**

**void get()**

**{**

**System.out.println("This is overriden method of class B");**

**}**

**}**

**NOTE:** ***abstract*** **keyword cannot be used with variables and constructor.** Not allowed in java.

Actual java code (in **“PDF”** and **“.java”** file) along with its output is in the same folder named

* **Abstract\_Main**
* **Abstract\_Main2**