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");
    }
```

```java
}
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

```java
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**