Java Access Modifier

Private:

Access level of private variable and private method:

Private variables can be accessed only within the class. From nowhere we can access the private variable.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Within class | Child class | Other class same package | Different Package  Child class | Different Package not  Child class |
| Yes | No | No | No | No |

Public:

Can be accessed from within the class, outside the class,child class outside package, child class within the package,other class ...

Access level of Public variable and Public method

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Within class | Child class | Other class same package | Different Package  Child class | Different Package not  Child class |
| Yes | Yes | Yes | Yes | Yes |

Protected:

Protected variable can be accessed within class, by child class of same package and child class from different package...

Access level of Protected variable and Protected method

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Within class | Child class | Other class same package | Different Package  Child class | Different Package not  Child class |
| Yes | Yes | Yes | Yes | No |

Default:

Can be accessed within the same class, child class and other class inside same package…

Cannot be accessed from other package.

Access level of Default variable and Default method

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Within class | Child class | Other class same package | Different Package  Child class | Different Package not  Child class |
| Yes | Yes | Yes | No | No |