|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Variable | | | Method | | | Object | | |
|  | Public | Private | Protected | Public | Private | Protected | Public | Private | Protected |
| Base Class | Y | Y | Y |  |  |  | Y | Y | Y |
| Derived class | Y | N | N |  |  |  | N | N | N |
|  |  |  |  |  |  |  |  |  |  |
| Derived class | Y | Y | Y |  |  |  |  |  |  |
| Base Class | N | N | N |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Base class |  |  |  |  |  |  |  |  |  |
| Friend Function outside the class |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Derived class |  |  |  |  |  |  |  |  |  |
| Friend Function outside the class |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Base Class |  |  |  |  |  |  |  |  |  |
| Friend  Class |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Derived class |  |  |  |  |  |  |  |  |  |
| Friend Class |  |  |  |  |  |  |  |  |  |

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|  |  |  | Variable | | | Method | | | Object | | |
| Inheritance Type | Access mode |  | Public | Private | Protected | Public | Private | Protected | Public | Private | Protected |
| Single Inheritance | Public | Base Class | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Derived class | y | n | y | y | n | y | y | n | y |
|  |  |  |  |  |  |  |  |  |  |  |
| Private | Base Class |  |  |  |  |  |  |  |  |  |
| Derived class |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| Protected | Base Class |  |  |  |  |  |  |  |  |  |
| Derived class |  |  |  |  |  |  |  |  |  |

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|  |  |  | Variable | | | Method | | | Object | | |
| Inheritance Type | Access mode |  | Public | Private | Protected | Public | Private | Protected | Public | Private | Protected |
| Multiple Inheritance | Public | Base Class |  |  |  |  |  |  |  |  |  |
| Derived class |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| Private | Base Class |  |  |  |  |  |  |  |  |  |
| Derived class |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| Protected | Base Class |  |  |  |  |  |  |  |  |  |
| Derived class |  |  |  |  |  |  |  |  |  |

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|  |  |  | Variable | | | Method | | | Object | | |
| Inheritance Type | Access mode |  | Public | Private | Protected | Public | Private | Protected | Public | Private | Protected |
| Multi level Inheritance | Public | Base Class |  |  |  |  |  |  |  |  |  |
| Derived class |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| Private | Base Class |  |  |  |  |  |  |  |  |  |
| Derived class |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| Protected | Base Class |  |  |  |  |  |  |  |  |  |
| Derived class |  |  |  |  |  |  |  |  |  |

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|  |  |  | Variable | | | Method | | | Object | | |
| Inheritance Type | Access mode |  | Public | Private | Protected | Public | Private | Protected | Public | Private | Protected |
| Hierarchical Inheritance | Public | Base Class |  |  |  |  |  |  |  |  |  |
| Derived class |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| Private | Base Class |  |  |  |  |  |  |  |  |  |
| Derived class |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| Protected | Base Class |  |  |  |  |  |  |  |  |  |
| Derived class |  |  |  |  |  |  |  |  |  |