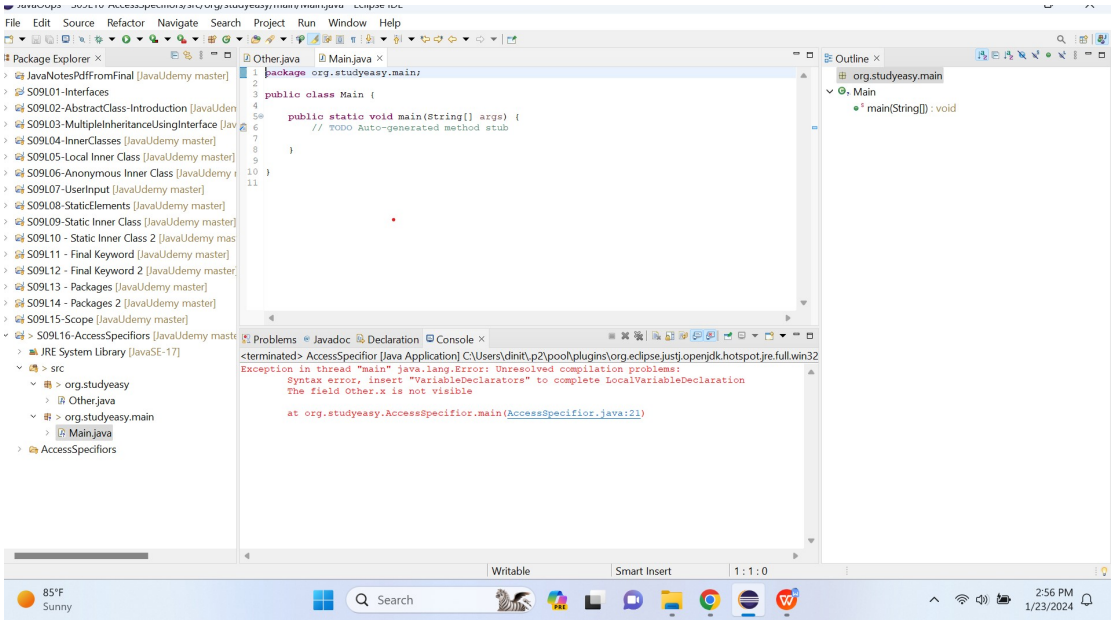
ACCESS SPECIFIORS/ACCESS MODIFIERS/SCOPE SPECIFIORS

Modifier	Description
private	Element accessible only within class.
default/ no modifier	No modifier is treated as default modifier. The default modifier is accessible only within package.
protected	Protected modifier is accessible both within and outside the package but through inheritance only.
public	The public modifier is accessible everywhere. It has the widest scope among all other modifiers.

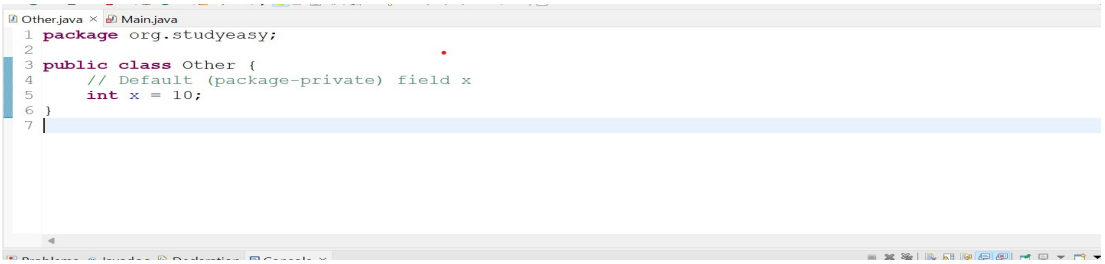
	default	private	protected	public
Same Class	Yes	Yes	Yes	Yes
Same package subclass	Yes	No	Yes	Yes
Same package non-subclass	Yes	No	Yes	Yes
Different package subclass	No	No	Yes	Yes
Different package non-subclass	No	No	No	Yes

Access modifiers in Java without inheritance

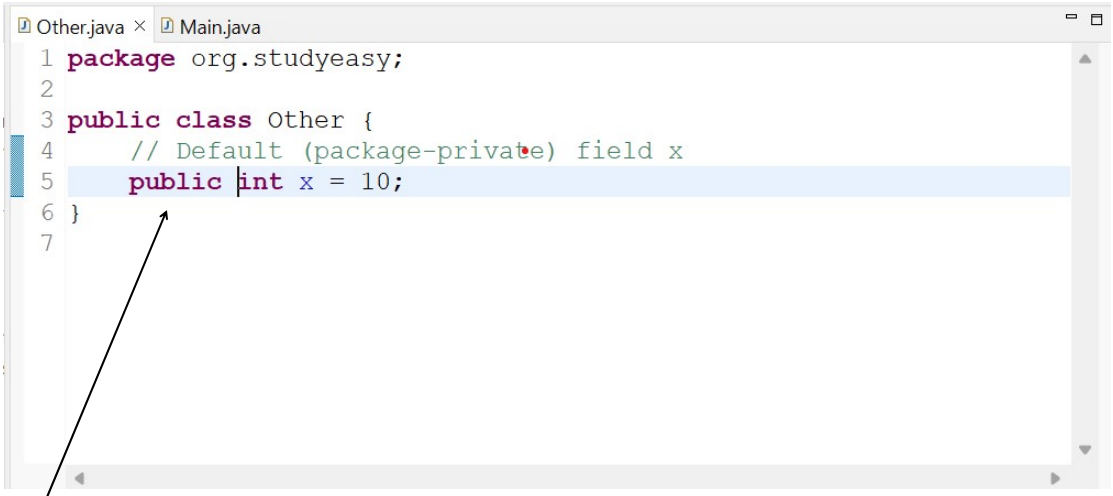
OtherClass.java



Unresolved Compilation Error - Different Package



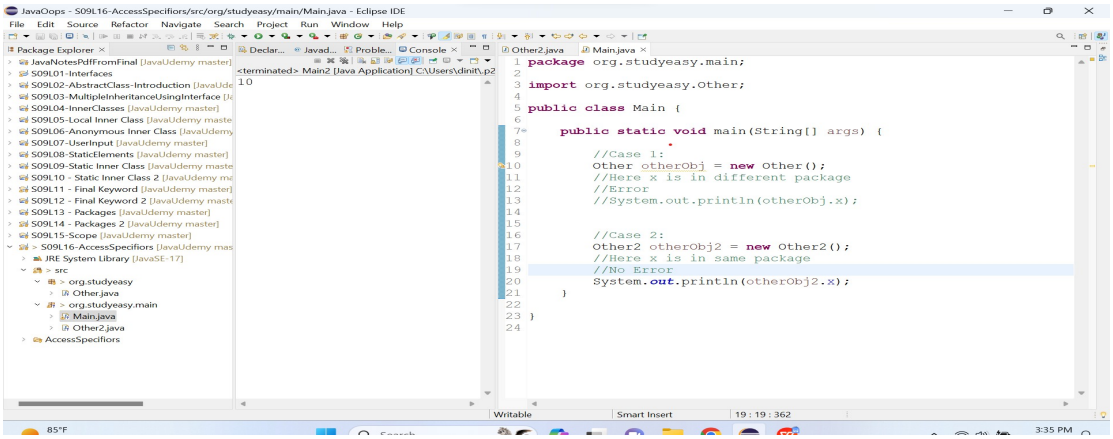
Solution:

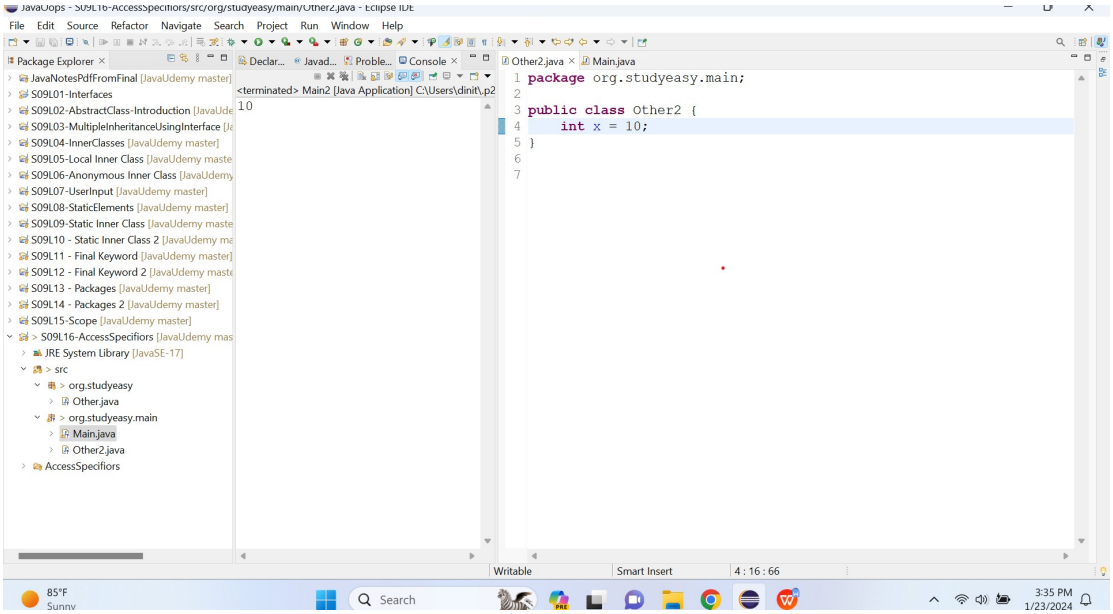


Make the variable as public, then you get output as 10.

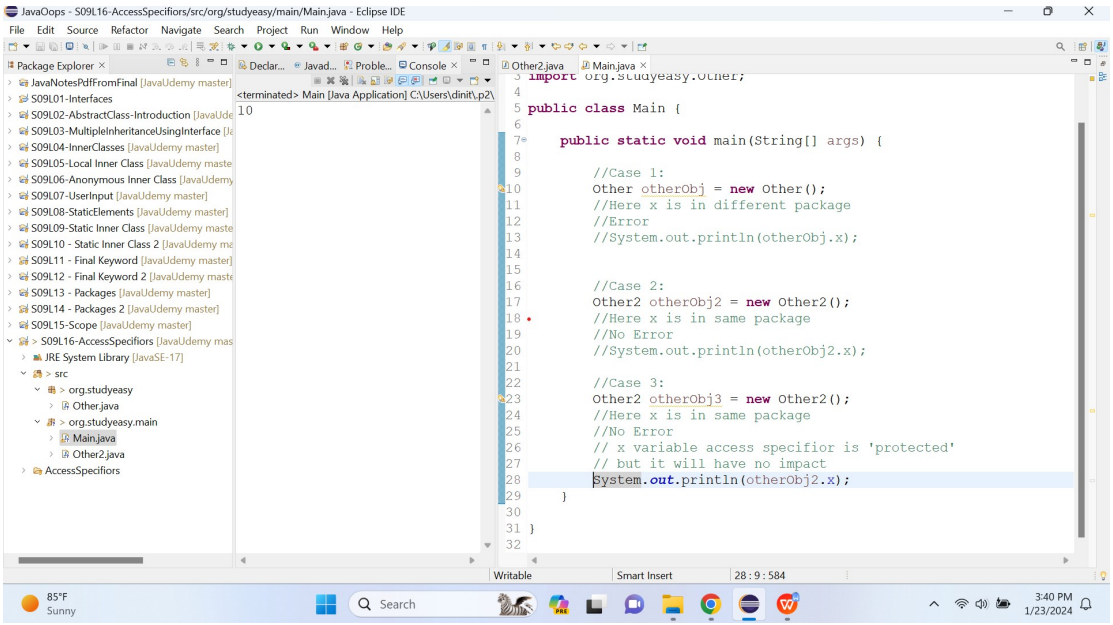
Unresolved Compilation Error - Same Package

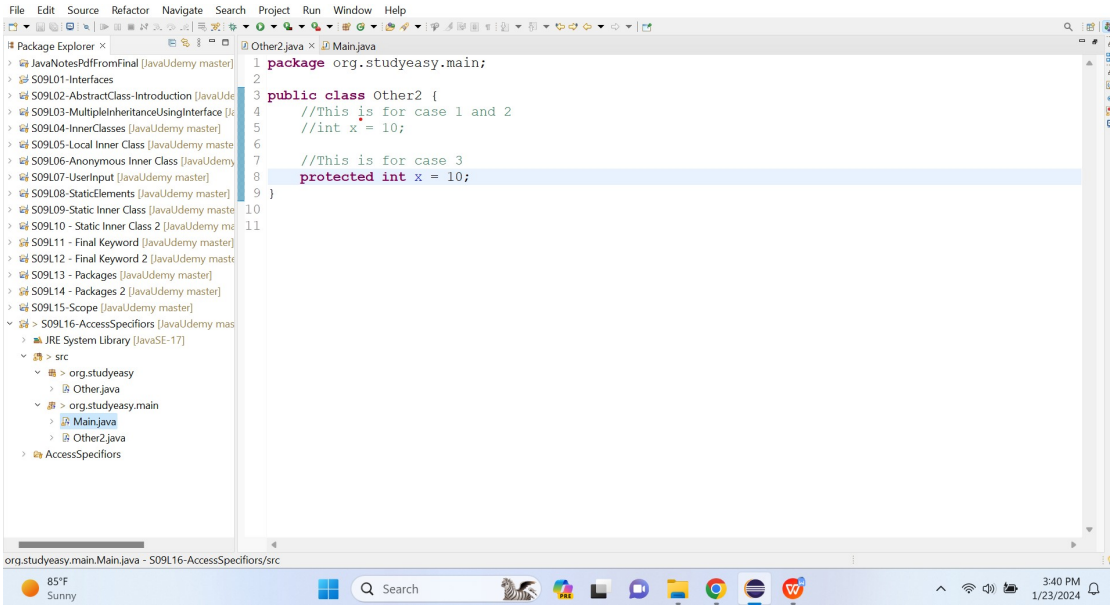
You get output as 10.



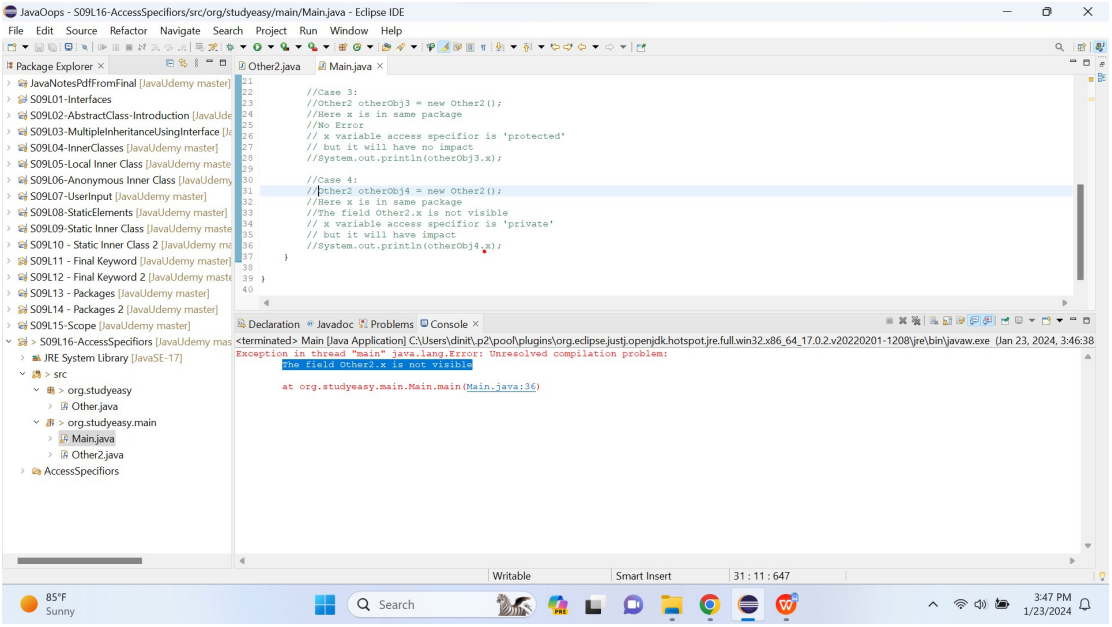


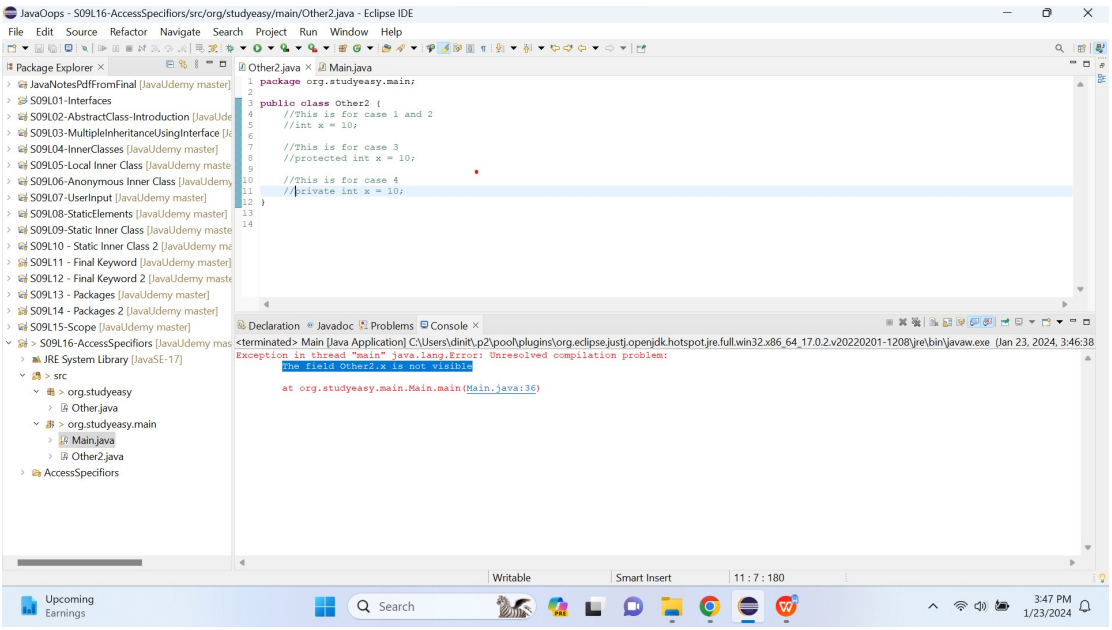
Unresolved Compilation Error - Same Package- Using Protected Access Specifior:



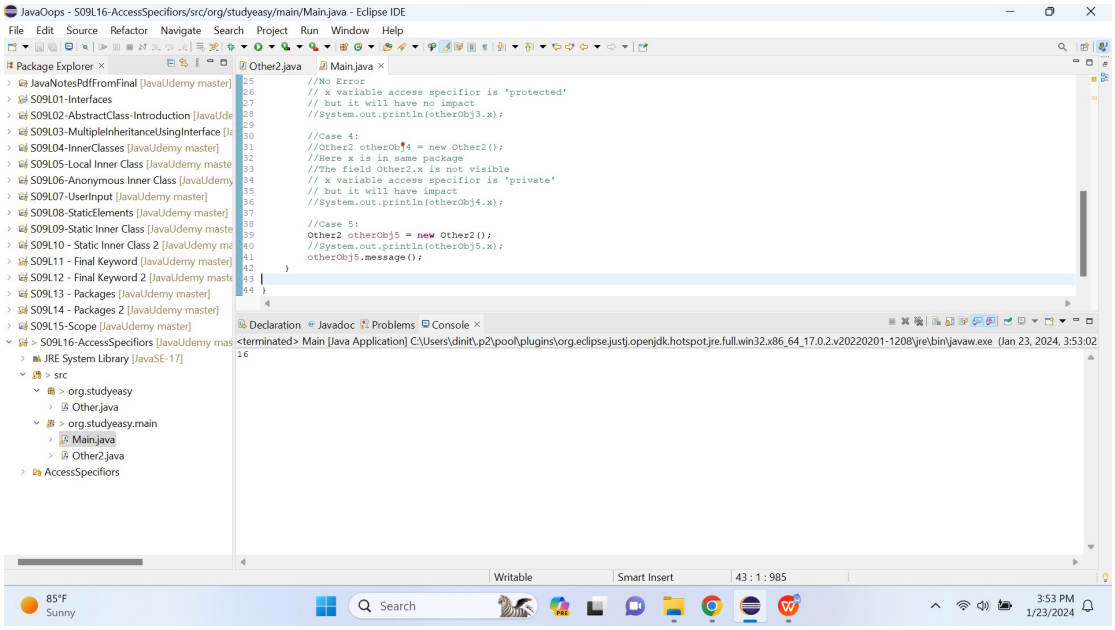


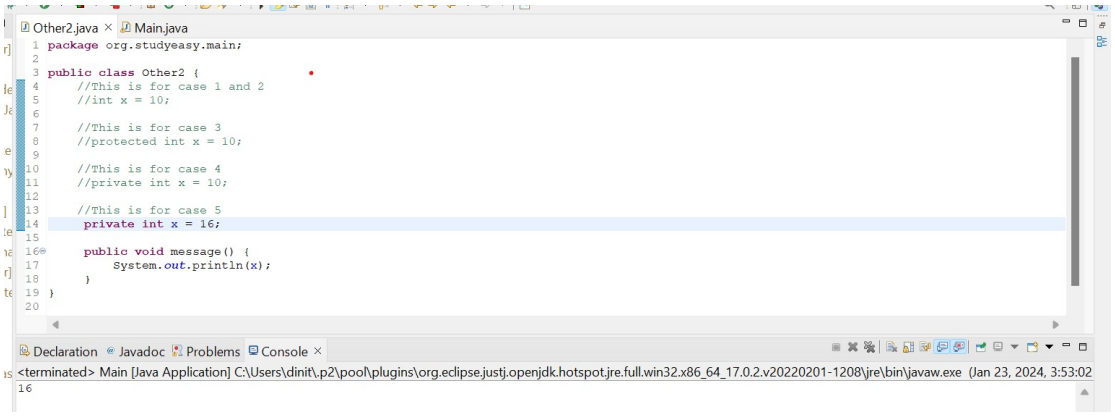
Unresolved Compilation Error - Same Package- Using Private Access Specifior:





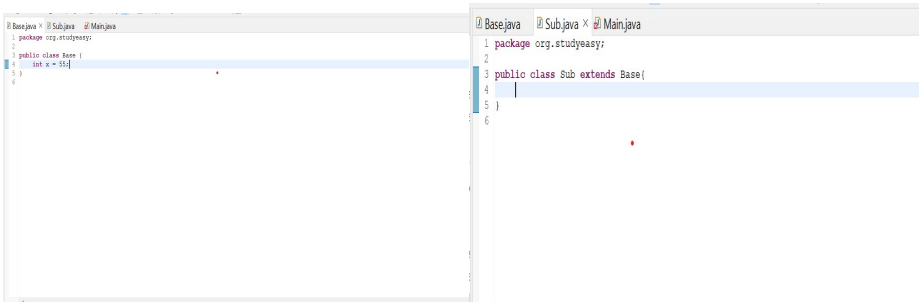
Unresolved Compilation Error - Same Package- Using Private Access Specifior - Calling Through a Method:

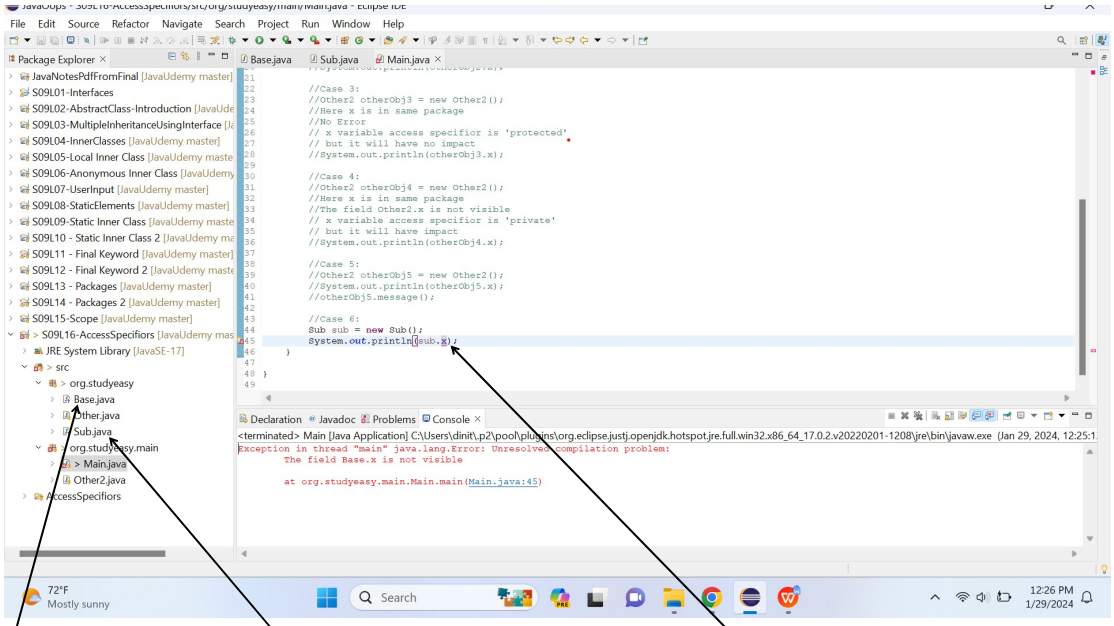




Unresolved Compilation Error - Inheritance Approach

Base.java Sub.java

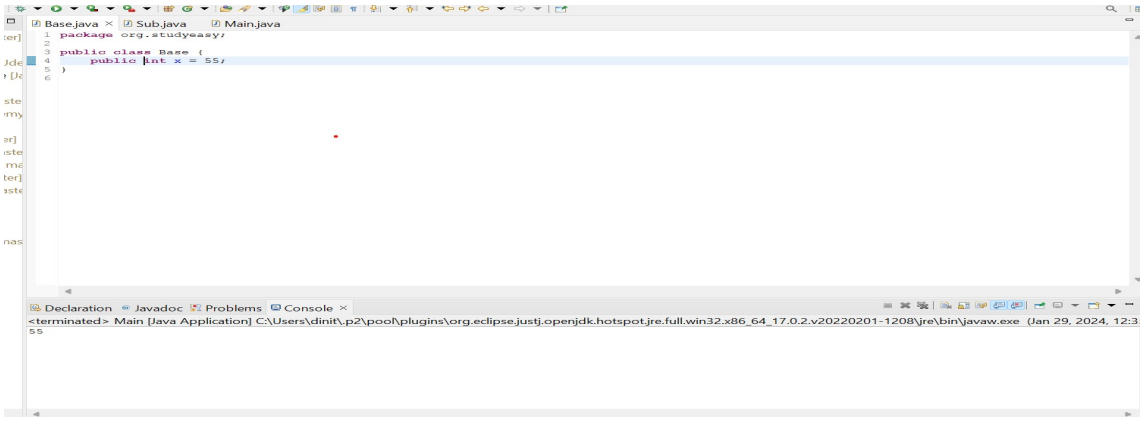


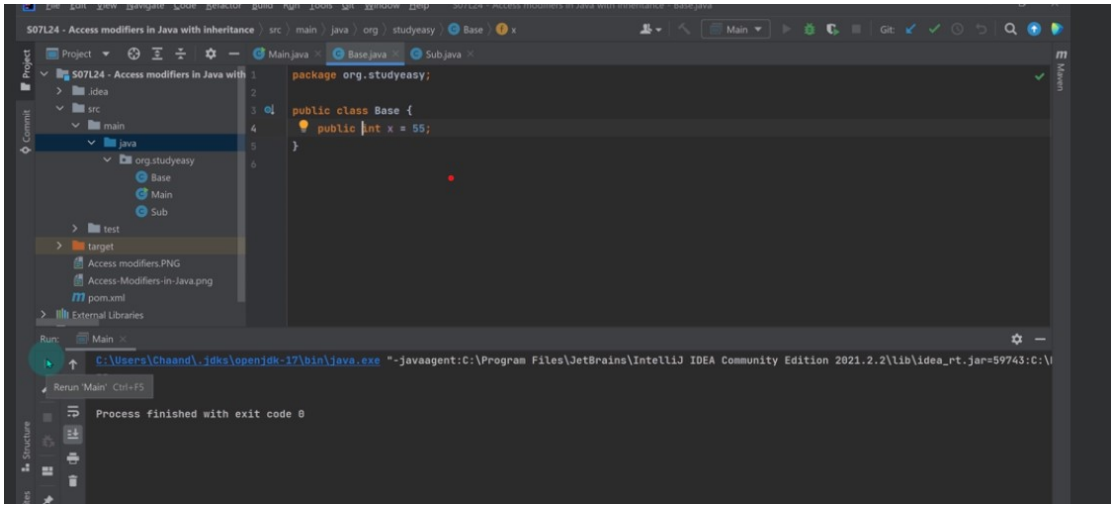


This is the Base Class

This is the Parent Class

Trying to access variable x from Parent Class Gives you error. So to access it make the Variable as public.





You can also bring Main.java in same package to get rid of the error.(Different IDE but same concept).
For both private and protected access specifiors.