Coupling

Coupling refers to the degree of direct knowledge that one element has of another. In other words, how often do changes in class A force related changes in class B.

They are two types of coupling

1.tight coupling

2. loose coupling

**Tight coupling :**

In general, Tight coupling means the two classes often change together. In other words, if A knows more than it should about the way in which B was implemented, then A and B are tightly coupled.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* first class \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

**package** tightcoupling;

**class** Box {

**public** **int** volume;

      Box(**int** length, **int** width, **int** height) {

**this**.volume = length \* width \* height;

      }

}

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* main class \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

**class** Volume {

**public** **static** **void** main(String args[]) {

           Box b = **new** Box(15, 15, 15);

           System.out.println(b.volume);

      }

}

**Loose coupling :**

loose coupling means they are mostly independent. If the only knowledge that class A has about class B, is what class B has exposed through its interface. then class A and class B are said to be loosely coupled.

\*\*\*\*\*\*\*\*\*\*\*\* interface \*\*\*\*\*\*\*\*\*

**package** com.techno.coupling;

**public** **interface** Topic

{

**void** understand();

}

\*\*\*\*\*\*\*\*\*\*\*\*\*\* class 1 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

**class** Topic1 **implements** Topic {

**public** **void** understand()

{

System.***out***.println("Prudhvi");

}

}

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* class2 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

**class** Topic2 **implements** Topic {

**public** **void** understand()

{

System.***out***.println("hey it's me");

}

}

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* class3 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

**public** **class** Subject {

**public** **static** **void** main(String[] args)

{

Topic t = **new** Topic1();

t.understand();

}

}