

① We can apply the renovation scenario in a maintaining the codes in different classes. We may think we have a 'Factory' class, which has functionality like - produce Biscuits() and others.

It can be

Biscuit Factory
<ul style="list-style-type: none"> - Biscuit Brand - Machinery - Location - Building
<ul style="list-style-type: none"> + Biscuit Factory() + set Biscuit Brand() + set Machinery() + set Location() + get Biscuit Brand() + close Factory()

Now, in our code for renovation process, we may renovate oldFactory with getters and setters methods.

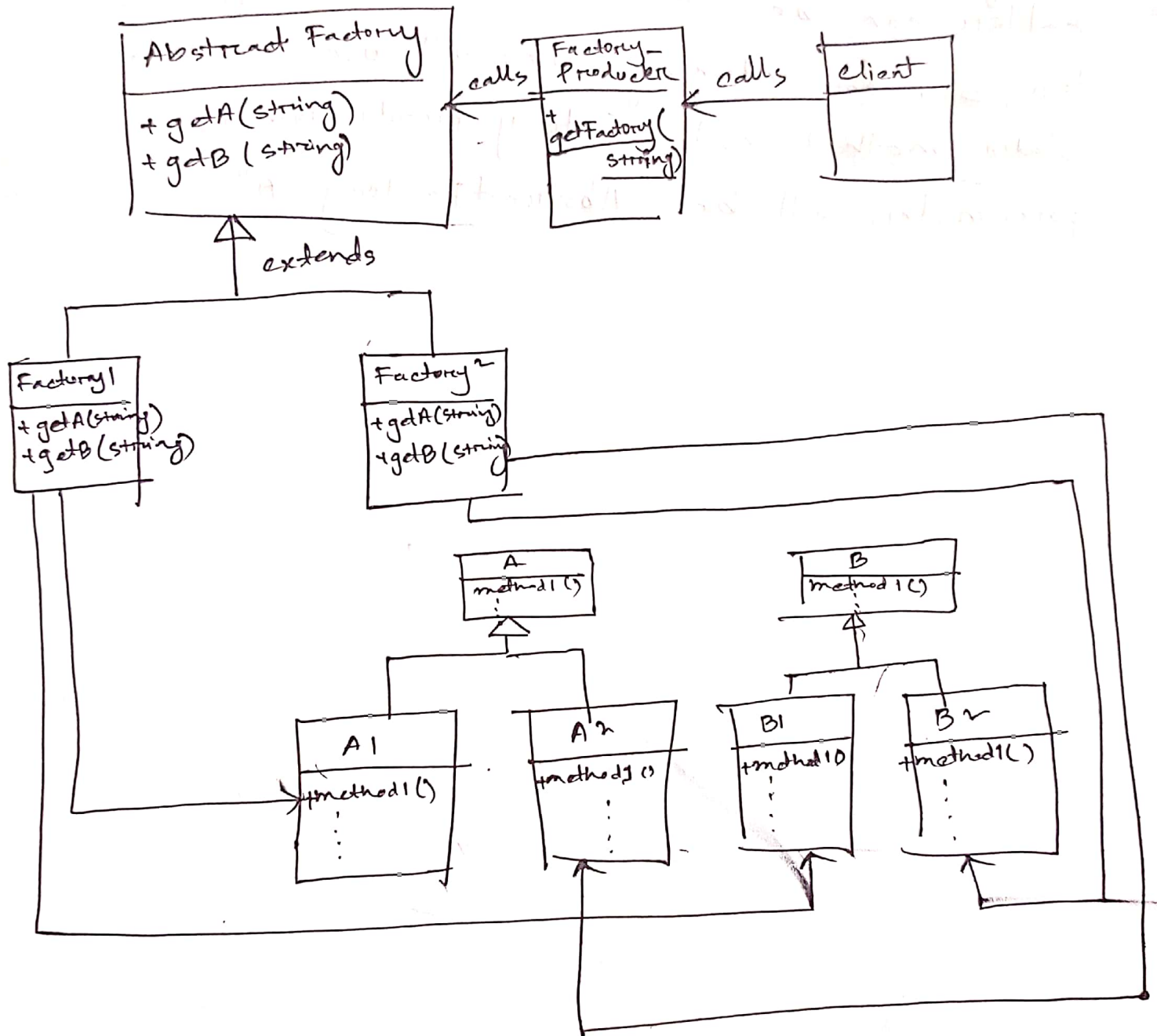
We can do something like: -

```

BiscuitFactory renovate (BiscuitFactory old_Factory, String new_Machinery, String Location) {
    BiscuitFactory newFactory = old_Factory;
    new_Factory.setMachinery(newMachinery);
    new_Factory.setLocatin(new_Location);
    old_Factory.closeFactory();
    return new_Factory;
}

```

② Simplified diagram -



Abstract Factory ^{pattern} can index the factory classes. whenever we need an indexing of factory classes, as abstract factory pattern is best place to put it. Inside factory producers we know

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all the names ^{and types} of ~~fact~~ all factories. That's why, it can be easily done there. Along side being a factory for factory, abstract factory pattern can be used to index the factories too. So, for indexing, we will use another static method inside factory producer. Its parameter will be "Abstract Factory A".