

## QUIZ # 2

NAME :	ROLL NO. #
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```
public interface ChineseFood {
    void chineseRice();
    void chineseNoodles();
}

public class ChinesePack implements ChineseFood {
    @Override
    public void chineseRice() {
        System.out.println("Chinese Rice with Soy Sauce ordered");
    }
    @Override
    public void chineseNoodles() {
        System.out.println("Chinese Noodles with Red Sauce ordered");
    }
}

public interface MexicanFood {
    void mexicanNachos();
}

public class MexicanPack implements MexicanFood {
    @Override
    public void mexicanNachos() {
        System.out.println("Mexican Nachos Crispy ordered");
    }
}

public interface Kitchen {
    public ChineseFood getChineseFood();
    public MexicanFood getMexicanFood();
}
```

```

public class ChefA implements Kitchen {

    @Override
    public ChineseFood getChineseFood() {
        System.out.println("Chinese Food Order for ChefA");
        return new ChinesePack();
    }

    @Override
    public MexicanFood getMexicanFood() {
        System.out.println("Mexican Food Order for ChefA");
        return new MexicanPack();
    }

}

public class ChefB implements Kitchen {

    @Override
    public ChineseFood getChineseFood() {
        System.out.println("Chinese Food Order for ChefB");
        return new ChinesePack();
    }

    @Override
    public MexicanFood getMexicanFood() {
        System.out.println("Mexican Food Order for ChefB");
        return new MexicanPack();
    }

}

```

**Q1:** Identify the design pattern used in above coded solution.  
Mention Entity – Class pairing. (5)

**Q2:** Draw complete Diagram for the above mentioned solution  
based on the used design pattern. (5)

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## Solution

**Q1:**

Entity-Class Pairing:

Abstract Factory → Kitchen

Concrete Factory → ChefA, ChefB

Abstract Product → ChineseFood, MexicanFood

Concrete Product → ChinesePackByChefA, ChinesePackByChefB,  
MexicanPackByChefA, MexicanPackByChefB

**Q2:**

