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Assignment 4- Factory Design Pattern

```
interface Food{
  void Catagory();
}
class Chinise implements Food{
  public void Catagory(){
    System.out.println("Manchurian, Noodles Available here!");
  }
}
class SouthIndian implements Food{
  public void Catagory(){
    System.out.println("Dosa,Idli available here!");
  }
}
class Italian implements Food{
  public void Catagory(){
    System.out.println("Pizza,Pasta avilable here!");
  }
}
class FoodCanteenFactory{
  public Food getInstance(String str){
    if(str.equals("Manchurian, Noodles Available here!"))
```

```
return new Chinise();
else if(str.equals("Dosa,Idli available here!"))
return new SouthIndian();
else
return new Italian();
}

public class Factory_Design_pattern {
public static void main(String[] args) {
FoodCanteenFactory Foodf = new FoodCanteenFactory();
Food obj = Foodf.getInstance("Dosa,Idli available here!");
obj.Catagory();
}
```

Output:

```
> cd "d:\DP\" ; if ($?) { javac Factory_Design_pattern.java } ; if ($?) { java
Factory_Design_pattern }
Dosa,Idli available here!
PS D:\DP>
```

Assignment 4- Builder Design Pattern

```
class Food {
      private String Name;
      private String Catagory;
      private String Type;
      private int Price;
      public Food(String Name, String Catagory, String Type, int Price) {
            super();
            this.Name = Name;
            this.Catagory = Catagory;
            this.Type = Type;
            this.Price = Price;
      }
      public String toString() {
            return "Food [Name=" + Name + ",Catagory=" + Catagory +
",Type=" + Type + ",Price=" + Price + "]";
      }
```

```
class FoodBuilder {
      private String Name;
      private String Catagory;
      private String Type;
      private int Price;
      public FoodBuilder setName(String Name) {
            this.Name = Name;
            return this;
      }
      public FoodBuilder setCatagory(String Catagory) {
            this.Catagory = Catagory;
            return this;
      }
      public FoodBuilder setType(String Type) {
            this.Type = Type;
            return this;
      }
      public FoodBuilder setPrice(int Price) {
            this.Price = Price;
            return this;
```

}

```
}
      public Food getFood() {
             return new Food(Name, Catagory, Type, Price);
      }
}
public class builder {
      public static void main(String[] args) {
             Food f = new
FoodBuilder().setName("Indian").setPrice(100).getFood();
             System.out.println(f);
      }
}
Output:
> cd "d:\DP\"; if ($?) { javac builder.java }; if ($?) { java builder }
Food [Name=Indian, Catagory=null, Type=null, Price=100]
PS D:\DP>
```