

# Catalog

## Problem ID: p10catalog

In this project, you implement two classes: `Item` in the file `item.py` and `Catalog` in the file `catalog.py`.

- The constructor for `Item` accepts two string parameters. The first one denotes the name of the item and the second denotes the item's category.
- The constructor for `Catalog` accepts one string parameter, denoting the name of the catalog.
- `Catalog` keeps track of a collection of `Item`. The collection you decide to use needs to maintain insertion order.
- Both `Item` and `Catalog` contain several instance methods. The methods in `Catalog` and `Item` will be tested using unit tests. You should be able to figure out what methods are needed, by inspecting the following main program and its output:

```
from item import Item
from catalog import Catalog

item1 = Item("Green Book", "Biography")
print(item1)

item2 = Item("The God", "Crime")
print(item2)
item2.set_name("The Godfather")
print(item2)

item3 = Item("Schindler's List", "Biography")
print(item3)
item3.set_category("Drama")
print(item3)

catalog = Catalog("Films")
catalog.add(item1)
catalog.add(item2)
catalog.add(item3)
print(catalog)

catalog.remove(item2)
print(catalog)

catalog.set_name("Favorite Movies")
print(catalog)

catalog.clear()
print(catalog)
```

## Output

The output from the main program is the following:

```
Name: Green Book, Category: Biography
Name: The God, Category: Crime
Name: The Godfather, Category: Crime
Name: Schindler's List, Category: Biography
Name: Schindler's List, Category: Drama
```

```
Catalog Films:
    Name: Green Book, Category: Biography
    Name: The Godfather, Category: Crime
    Name: Schindler's List, Category: Drama
Catalog Films:
    Name: Green Book, Category: Biography
    Name: Schindler's List, Category: Drama
Catalog Favorite Movies:
    Name: Green Book, Category: Biography
    Name: Schindler's List, Category: Drama
Catalog Favorite Movies:
```

**Note:** When individual Item for a given Catalog are printed, one tab-character appears at the start of each line. You should **not** submit the main program as part of your solution, only the files `item.py` and `catalog.py`.