

Assignment 7

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2022.4.19

格式相关

- 文档提供 markdown、pdf 和 word 格式
- 文件夹 README 下存放 运行结果截图
- 其他文件夹存放 代码

1. SL275 Module7 Ex.2

1-1 调用每个对象的方法

```
a) calling methods in each object:

1) Fish d
This fish's name is "" (an empty string)
The fish is playing.
Fish can't walk.
The fish is eating.

2) Cat c
This cat's name is "Fluffy"
The cat is playing.
This kind of animal walks by 4 legs.
The cat is eating.

3) Animal a
Fish can't walk.
The fish is eating.

4) Animal e
This kind of animal walks by 8 legs.
The spider is eating.

5) Pet p
The cat is playing.
```

1-2 对象类型转换 (通过将Animal a转换为Fish, 将Pet p转换为Cat来演示)

```
b) casting object
The fish is playing.
The cat is eating.
```

1-3 多态 (通过TestElecDevice类中的polymorphismChecker方法来演示)

```
c) polymorphism
This animal is a fish.
This animal is a cat.
This animal is a fish.
This animal is a spider.
```

1-4 通过super来调用父类方法 (在Fish类中添加了superWalk方法来演示)

```
d) using "super" to call super class methods
Fish can't walk.
This kind of animal walks by 0 legs.
```

2. Inheritance & Polymorphism

2-1 无命令行参数(或参数错误)

```
PS E:\Inheritance&Polymorphism> java TestElecDevice
Refrigerator - turnOn()
Refrigerator - turnOff()
- Arguments error.
- Set ad to AudioDevice.
AudioDevice - increaseVol()
AudioDevice - decreaseVol()
```

2-2 命令行参数为"TV"

```
PS E:\Inheritance&Polymorphism> java TestElecDevice TV
Refrigerator - turnOn()
Refrigerator - turnOff()
AudioDevice - increaseVol()
TV - increaseVol()
AudioDevice - decreaseVol()
TV - decreaseVol()
```

2-3 命令行参数为"Radio"

```
PS E:\Inheritance&Polymorphism> java TestElecDevice Radio
Refrigerator - turnOn()
Refrigerator - turnOff()
AudioDevice - increaseVol()
Radio - increaseVol()
AudioDevice - decreaseVol()
Radio - decreaseVol()
```