- 1. 启动服务器
 - a. 格式: python manage.py runserver ip: port
 - b. IP可以不写,不写代表本地
 - c. 端口号默认是8000, 可以修改
 - d. python manage.py runserver : 默认localhost: 8000
 - (base) D:\pyCharm\learn\project01>python manage.py runserver
 - e. 该服务器是纯python写的轻量级的web服务器,仅仅在开发测试中使用。
- 2. Admin站点管理
 - a. 概述
 - i. 内容发布
 - 1) 负责添加、修改、删除内容(数据表中的数据)
 - ii. 公告访问
 - b. 配置Admin应用
 - i. 在settings.py 文件的INSTALLED_APPS中添加django.contrib.admin, 默认已经添加。
 - ii. 创建管理员用户

```
(base) D:\pyCharm\learn\project01>python manage.py createsuperuser
Username (leave blank to use 'lenovo'): root
Email address: 148@qq.com
Password:
Password (again):
This password is too common.
Bypass password validation and create user anyway? [y/N]: y
Superuser created successfully.
```

- iii. 汉化
 - 1) 把LANGUAGE_CODE='en-us'修改为LANGUAGE_CODE='zh-hans'
 - 2) 把时区修改为: TIME_ZONE='Asia/Shanghai'
 - 3) 管理数据表:
 - a) 修改admin.py文件

```
# Register your models here.

from .models import Grades,Student

# 注册
admin.site.register(Grades)
admin.site.register(Student)
```

- b) 自定义管理页面
 - i) 列表页属性:

One. list_display: 显示字段

Two. list_filter: 列表根据字段过滤

Three. list_per_page: 分页

Four. search fields: 根据字段搜索(模糊查询)

- ii) 添加、修改页属性:
- iii) fields: fields决定属性在添加和修改页的先后顺序
 - iv) fieldsets: 给属性分组
 - v) 注意 fields与fieldsets不能同时使用

```
# 列表页属性
list_display = ["pk","gname","gdate","ggirlnum","gboynum","isDelete"]
list filter = ["gname"]
```

```
class GradesAdmin(admin.ModelAdmin):

# 列表页為性

list_display = ["pk","gname","gdate","ggirlnum","gboynum","isDelete"]

list_filter = ["gname"]

search_fields = ["gdate"]

list_per_page = 2

# 添加 修改 页属性

# fields = ["ggirlnum","gboynum","gname","gdate","isDelete"]

fieldsets = [
    ("num", {"fields":["ggirlnum","gboynum"]}),
    ("base", {"fields":["gname", "gdate", "isDelete"]})

]

admin.site.register(Grades, GradesAdmin)
```

- 4) 关联对象:
 - a) 需求: 创建一个班级时可以直接添加几个学生

```
class StuentInfo(admin.TabularInline):
    model = Student
    exec = 2
class GradesAdmin(admin.ModelAdmin):
    inlines = [StuentInfo]
```

b) 布尔值显示问题

```
| class StudentAdmin(admin.ModelAdmin):
| def gender(self):
| if self.sgender:
| return "男"
| else:
| return "女"
| # 设置字段的显示名称
| gender.short_description = "性别"
| list_display = ["pk", "sname", gender, "sage", "scontend", "sgrade", "isDelete"]
| list_per_page = 10
```

5) 执行动作的位置问题

```
# 执行动作的位置
actions_on_bottom = True
actions_on_top = False
```

- 6) 使用装饰器完成注册
 - a) 用 @admin.register(Student) 代替 admin.site.register(Student,StudentAdmin)