











```
from django.db import models

# Create your models here.

class Book(models.Model):
    title = models.CharField(max_length=50)
    authors = models.CharField(max_length=50)
    price = models.FloatField(default=0.0)
    edition = models.SmallIntegerField(default=1)

class Meta:
    db_table = "books"
```

```
class Address(models.Model):
    city = models.CharField(max_length=100)

class Student(models.Model):
    name = models.CharField(max_length=100)
    age = models.IntegerField()
    address = models.ForeignKey(Address, on_delete=models.CASCADE)
```

```
def task1_view(request):
   books =Book.objects.filter(Q(price lte=80))
   return render(request, 'bookmodule/task1.html', {'books': books})
def task2_view(request):
   books = Book.objects.filter(
      Q(edition__gt=3) & (Q(title__icontains='co')
Q(authors__icontains='co'))
   return render(request, 'bookmodule/task2.html', {'books': books})
def task3 view(request):
   books = Book.objects.filter(
      ~Q(edition__gt=3) & ~(Q(title__icontains='co') |
Q(authors__icontains='co'))
   return render(request, 'bookmodule/task3.html', {'books': books})
def task4 view(request):
   books = Book.objects.all().order_by('title')
   return render(request, 'bookmodule/task4.html', {'books': books})
def task5_view(request):
   stats = Book.objects.aggregate(
      total_books=Count('id'),
      total price=Sum('price'),
      avg_price=Avg('price'),
      max_price=Max('price'),
      min price=Min('price')
   return render(request, 'bookmodule/task5.html', {'stats': stats})
def task7_view(request):
    city_stats =
Address.objects.annotate(student_count=Count('student'))
    return render(request, 'bookmodule/task7.html', {'city_stats':
city stats )
```

```
from django.urls import path
from . import views

from . import apps

urlpatterns = [
path('task1/', views.task1_view,name="bookmodule.task1"),
    path('task2/', views.task2_view),
    path('task3/', views.task3_view),
    path('task4/', views.task4_view),
    path('task5/', views.task5_view),
    path('task7/', views.task7_view),
]
```