


# Python With Mysql

```
books.py M X
books.py > get_db
You, 18 minutes ago | 1 author (You)
1 from fastapi import FastAPI, Depends, HTTPException
2 from sqlalchemy.orm import Session
3 from database import SessionLocal
4 from models import Book
5 from schemas import BookCreate, BookUpdate, BookResponse
6 from typing import List
7
8 app = FastAPI()
9
10 # Dependency to get DB session
11 def get_db():
12     db = SessionLocal()
13     try:
14         yield db
15     finally:
16         db.close()
17
18 # Get all books
19 @app.get("/books", response_model=List[BookResponse])
20 def get_books(db: Session = Depends(get_db)):
21     return db.query(Book).all()
22
23 # Get book by ID
24 @app.get("/books/{book_id}", response_model=BookResponse)
25 def get_book(book_id: int, db: Session = Depends(get_db)):
26     book = db.query(Book).filter(Book.id == book_id).first()
27     if not book:
28         raise HTTPException(status_code=404, detail="Book not found")
29     return book
30
31 # Create new book
```

## 1. Create main file


Create main file for Create CRUD operation to  
Connect it database




```
al  Help  ←  →  
...  schemas.py U X
schemas.py > ...
1  from pydantic import BaseModel
2
3  class BookBase(BaseModel):
4      title: str
5      author: str
6      price: str
7
8  class BookCreate(BookBase):
9      pass
10
11 class BookUpdate(BookBase):
12     pass
13
14 class BookResponse(BookBase):
15     id: int
16
17     class Config:
18         orm_mode = True
19
```

## 2. Create the schemas

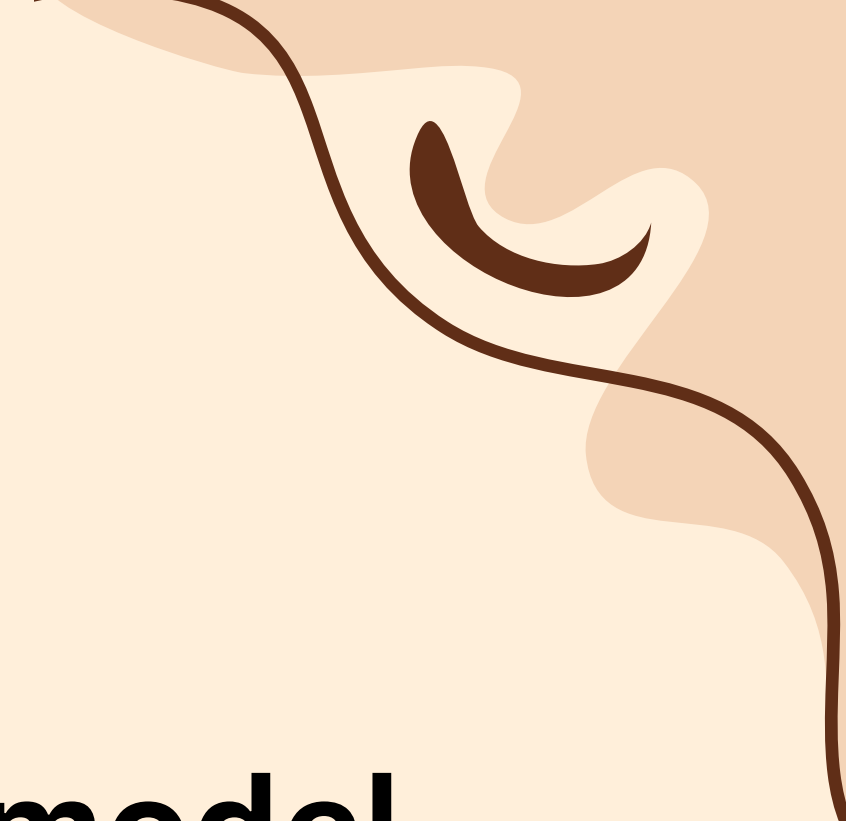
Create schemas for store table

 create\_tables.py U X

 create\_tables.py

```
1  from database import Base, engine
2  from models import Book
3
4  print("Creating tables...")
5  Base.metadata.create_all(bind=engine)
6  print("Tables created successfully!")
7  |
```

## 3. Create table




```
Help  < >  backendAPI

models.py U X
models.py > ...
1  from sqlalchemy import Column, Integer, String
2  from database import Base
3
4  class Book(Base):
5      __tablename__ = "books"
6
7      id = Column(Integer, primary_key=True, index=True)
8      title = Column(String(255), nullable=False)
9      author = Column(String(255), nullable=False)
10     price = Column(String(20), nullable=False)
11
```

## 4. create model

## 5. create file database for connect database



```
database.py U X
database.py > ...
1  from sqlalchemy import create_engine
2  from sqlalchemy.ext.declarative import declarative_base
3  from sqlalchemy.orm import sessionmaker
4
5  # Replace 'root' and '' with your MySQL username and password
6  DATABASE_URL = "mysql+mysqlconnector://root:@127.0.0.1/fastapi_db"
7
8  engine = create_engine(DATABASE_URL)
9  SessionLocal = sessionmaker(autocommit=False, autoflush=False, bind=engine)
10
11  Base = declarative_base()
12
```

THANK  
YOU

