## 06-Reading-Data-from-Room-Database-Fetch-Data

Dans BookDao.kt, on rajoute:

```
@Query("SELECT * FROM book")
fun getAllBooks(): LiveData<List<Book>>
```

Dans BookViewModel:

```
package iutinfo.lp.devmob.bookkeeper
import android.app.Application
import androidx.lifecycle.AndroidViewModel
import androidx.lifecycle.LiveData
import java.util.concurrent.Executors
class BookViewModel(application: Application): AndroidViewModel(application)
{
    private val bookDao: BookDao
    val allBooks: LiveData<List<Book>>
    private val myExecutor = Executors.newSingleThreadExecutor()
    init {
        val bookDB = BookRoomDatabase.getDatabase(application)
        bookDao = bookDB!!.bookDao()
        allBooks = bookDao.getAllBooks()
    }
    fun insert(book: Book) {
        myExecutor.execute{
            bookDao.insert(book)
        }
    }
}
```

On rajoute un observer dans le MainActivity :

```
bookViewModel.allBooks.observe(this) { books ->
   books?.let {
```

```
bookListAdapter.setBooks(books)
}
```

On définit le setBooks dans le BookListAdapter :

```
fun setBooks(books: List<Book>) {
   bookList = books
   notifyDataSetChanged()
}
```