

## ATIVIDADE 4.2 LARAVEL

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Turma: TSI/Tarde

Comando: `User::all();`

Resultado:

```
joao@Malachiel: ~/WEB2/At x + v
joao@Malachiel:~/WEB2/Atividades-Web2/atividade_4.1/example-app$ php artisan tinker
Psy Shell v0.12.4 (PHP 8.3.6 - cli) by Justin Hileman
> User::all();
[!] Aliasing 'User' to 'App\Models\User' for this Tinker session.
= Illuminate\Database\Eloquent\Collection {#6161
  all: [
    App\Models\User {#6162
      id: 1,
      name: "Dr. Ross Aufderhar PhD",
      email: "zcollins@example.com",
      email_verified_at: "2024-11-20 02:22:16",
      #password: "$2y$12$sWOD8zpsM80y7Aukrz7bd.K.00TkfQ5ramxbBqxCVqHfLuUI9L0dy",
      #remember_token: "CkIkdK4IiI",
      created_at: "2024-11-20 02:22:16",
      updated_at: "2024-11-20 02:22:16",
    },
    App\Models\User {#6163
      id: 2,
      name: "Ford Jerde",
      email: "merlin17@example.com",
      email_verified_at: "2024-11-20 02:22:16",
      #password: "$2y$12$sWOD8zpsM80y7Aukrz7bd.K.00TkfQ5ramxbBqxCVqHfLuUI9L0dy",
    },
  ],
}
```

Comando: `Book::find(333);`

Resultado:

```
joao@Malachiel: ~/WEB2/At x + v
> Book::find(333);
[!] Aliasing 'Book' to 'App\Models\Book' for this Tinker session.
= App\Models\Book {#5180
  id: 333,
  title: "Quisquam sed et ut ducimus nesciunt a.",
  author_id: 34,
  category_id: 9,
  publisher_id: 34,
  created_at: "2024-11-20 02:15:33",
  updated_at: "2024-11-20 02:15:33",
  published_year: 2016,
}
```

Comando: `Publisher::withCount('books')->take(20)->get();`

Resultado:

```
> Publisher::withCount('books')->take(20)->get();
[!] Aliasing 'Publisher' to 'App\Models\Publisher' for this Tinker session.
= Illuminate\Database\Eloquent\Collection {#6207
  all: [
    App\Models\Publisher {#6208
      id: 1,
      name: "Toy PLC",
      address: ""
        797 Rosetta Extensions Apt. 189\n
        Port Linwood, MO 77512-6722
        "",
      created_at: "2024-11-20 02:15:20",
      updated_at: "2024-11-20 02:15:20",
      books_count: 10,
    },
    App\Models\Publisher {#6209
      id: 2,
      name: "Vandervort Inc",
      address: ""
        469 Kuvalis Court\n
        Clairmouth, OK 50152
      },
  ],
}
```

Comando: `$mediaAno = Book::avg('published_year');`

Resultado:

[illegible]

Comando: `$somaAno = Book::sum('published_year');`

Resultado:

[illegible]

Comando: `$anoMaisAntigo = Book::min('published_year');`

Resultado:

[illegible]

Comando: `$anoMaisRecente = Book::max('published_year');`

Resultado:

```
joao@Malachiet: ~/WEB2/At  × + v
> $anoMaisRecente = Book::max('published_year');
= 2024

>
>
>
>
>
>
>
>
>
>
>
>
>
>
>
```

Comando: `$categorias = Category::withCount('books')->get();`

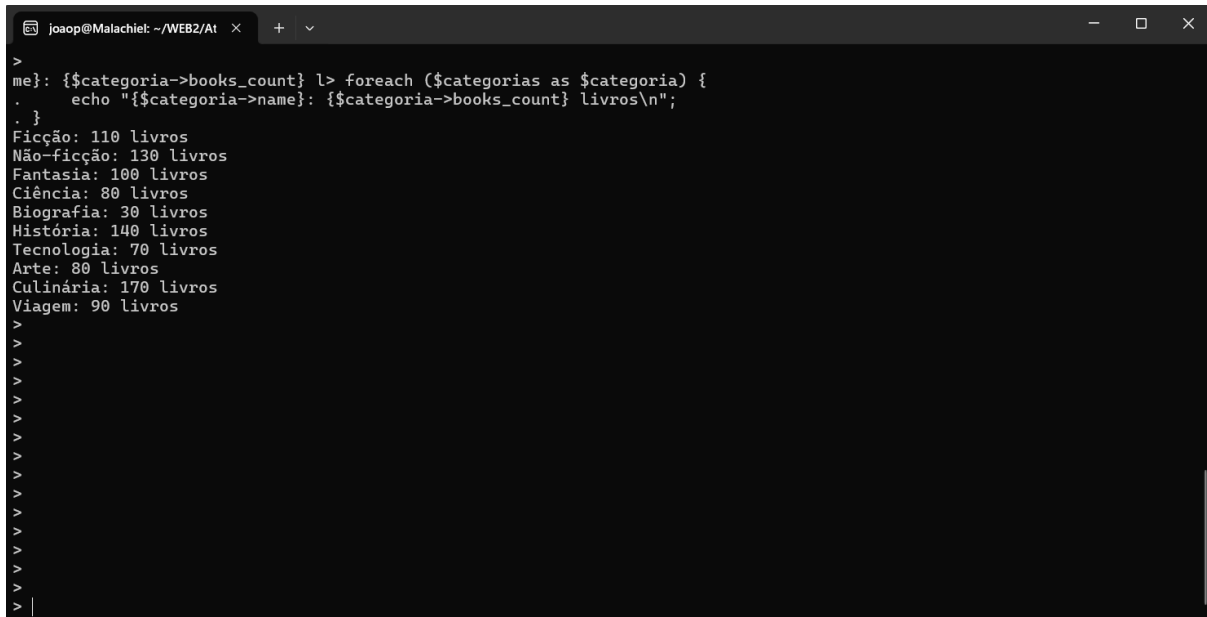
Resultado:

```
joao@Malachiet: ~/WEB2/At  × + v
> $categorias = Category::withCount('books')->get();
[!] Aliasing 'Category' to 'App\Models\Category' for this Tinker session.
= Illuminate\Database\Eloquent\Collection {#6169
  all: [
    App\Models\Category {#6172
      id: 1,
      name: "Ficção",
      created_at: "2024-11-20 02:15:16",
      updated_at: "2024-11-20 02:15:16",
      books_count: 110,
    },
    App\Models\Category {#6173
      id: 2,
      name: "Não-ficção",
      created_at: "2024-11-20 02:15:16",
      updated_at: "2024-11-20 02:15:16",
      books_count: 130,
    },
    App\Models\Category {#6174
      id: 3,
      name: "Fantasia",
      created_at: "2024-11-20 02:15:16",
      updated_at: "2024-11-20 02:15:16",
      books_count: 100,
    },
    App\Models\Category {#6175
      id: 4,
      name: "Ciência",
      created_at: "2024-11-20 02:15:16",
      updated_at: "2024-11-20 02:15:16",
    },
  ],
}
```

Comando 2:

```
foreach ($categorias as $categoria) {  
    echo "{$categoria->name}: {$categoria->books_count} livros\n";  
}
```

Resultado:



A terminal window titled 'joaop@Malachiet: ~/WEB2/At' displays the execution of a PowerShell command. The command is a foreach loop that iterates over a collection of categories and prints the category name and the number of books. The output shows the following categories and their respective book counts:

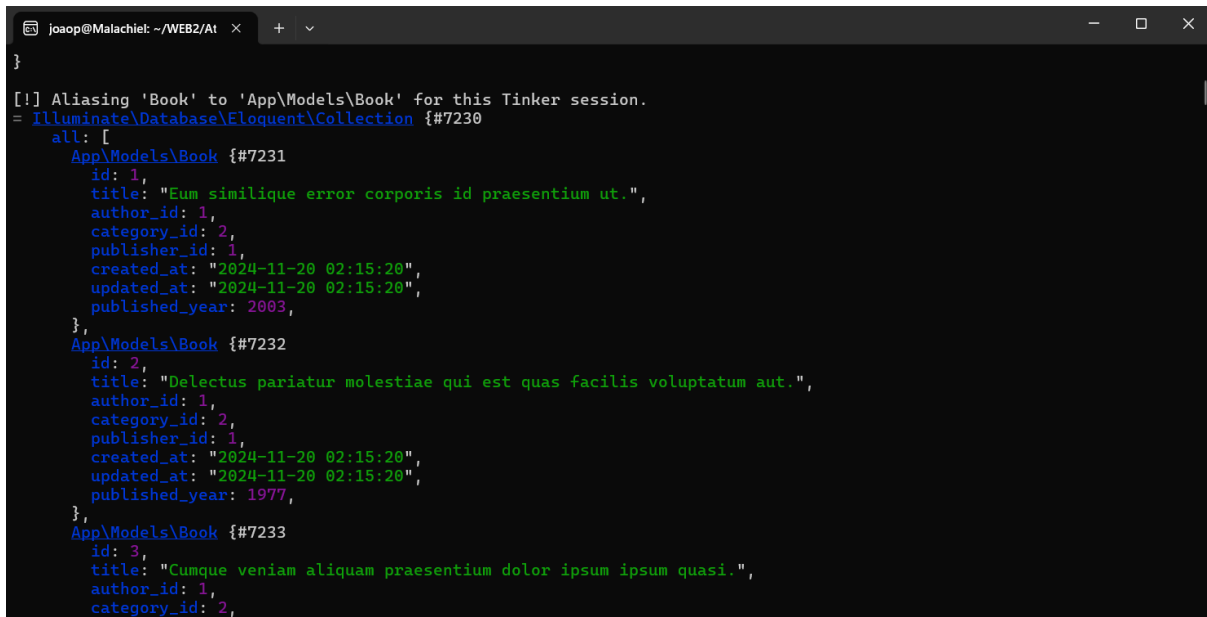
Category	Books Count
Ficção	110
Não-ficção	130
Fantasia	100
Ciência	80
Biografia	30
História	140
Tecnologia	70
Arte	80
Culinária	170
Viagem	90

Comando:

```
$books = Book::all();

foreach ($books as $book) {
    echo "{$book->title} - {$book->author->name}\n";
}
```

Resultado:



```
}

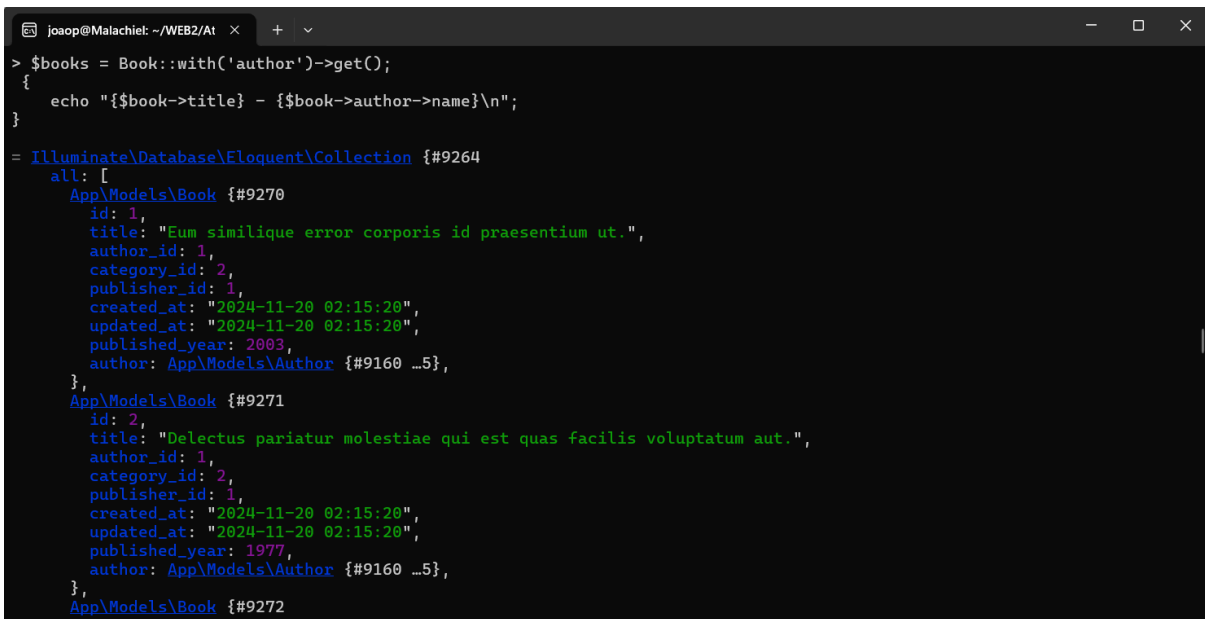
[!] Aliasing 'Book' to 'App\Models\Book' for this Tinker session.
= Illuminate\Database\Eloquent\Collection {#7230
  all: [
    App\Models\Book {#7231
      id: 1,
      title: "Eum similique error corporis id praesentium ut.",
      author_id: 1,
      category_id: 2,
      publisher_id: 1,
      created_at: "2024-11-20 02:15:20",
      updated_at: "2024-11-20 02:15:20",
      published_year: 2003,
    },
    App\Models\Book {#7232
      id: 2,
      title: "Delectus pariatur molestiae qui est quas facilis voluptatum aut.",
      author_id: 1,
      category_id: 2,
      publisher_id: 1,
      created_at: "2024-11-20 02:15:20",
      updated_at: "2024-11-20 02:15:20",
      published_year: 1977,
    },
    App\Models\Book {#7233
      id: 3,
      title: "Cumque veniam aliquam praesentium dolor ipsum ipsum quasi.",
      author_id: 1,
      category_id: 2,
```

Comando:

```
$books = Book::with('author')->get();

foreach ($books as $book) {
    echo "{$book->title} - {$book->author->name}\n";
}
```

Resultado:



The screenshot shows a terminal window with the following content:

```
joaop@Malachiel: ~/WEB2/At x + v
> $books = Book::with('author')->get();
{
    echo "{$book->title} - {$book->author->name}\n";
}

= Illuminate\Database\Eloquent\Collection {#9264
  all: [
    App\Models\Book {#9270
      id: 1,
      title: "Eum similique error corporis id praesentium ut.",
      author_id: 1,
      category_id: 2,
      publisher_id: 1,
      created_at: "2024-11-20 02:15:20",
      updated_at: "2024-11-20 02:15:20",
      published_year: 2003,
      author: App\Models\Author {#9160 ...5},
    },
    App\Models\Book {#9271
      id: 2,
      title: "Delectus pariatur molestiae qui est quas facilis voluptatum aut.",
      author_id: 1,
      category_id: 2,
      publisher_id: 1,
      created_at: "2024-11-20 02:15:20",
      updated_at: "2024-11-20 02:15:20",
      published_year: 1977,
      author: App\Models\Author {#9160 ...5},
    },
    App\Models\Book {#9272
```

Comando:

```
// Medindo o tempo para Lazy Loading
$inicioLazy = microtime(true);

$booksLazy = Book::all();
foreach ($booksLazy as $book) {
    echo "{$book->title} - {$book->author->name}\n";
}

$tempoTotalLazy = microtime(true) - $inicioLazy;
echo "Tempo total para Lazy Loading: {$tempoTotalLazy} segundos\n";
```

Resultado:

```
> $tempoTotalLazy = microtime(true) - $inicioLazy;
= 0.48184299468994

> echo "Tempo total para Lazy Loading: {$tempoTotalLazy} segundos\n";
Tempo total para Lazy Loading: 0.48184299468994 segundos
>
> |
```

Comando:

```
// Medindo o tempo para Eager Loading
$inicioEager = microtime(true);

$booksEager = Book::with('author')->get();
foreach ($booksEager as $book) {
    echo "{$book->title} - {$book->author->name}\n";
}

$tempoTotalEager = microtime(true) - $inicioEager;
echo "Tempo total para Eager Loading: {$tempoTotalEager} segundos\n";
```

Resultado:

```
> $tempoTotalEager = microtime(true) - $inicioEager;
= 0.0816490650177

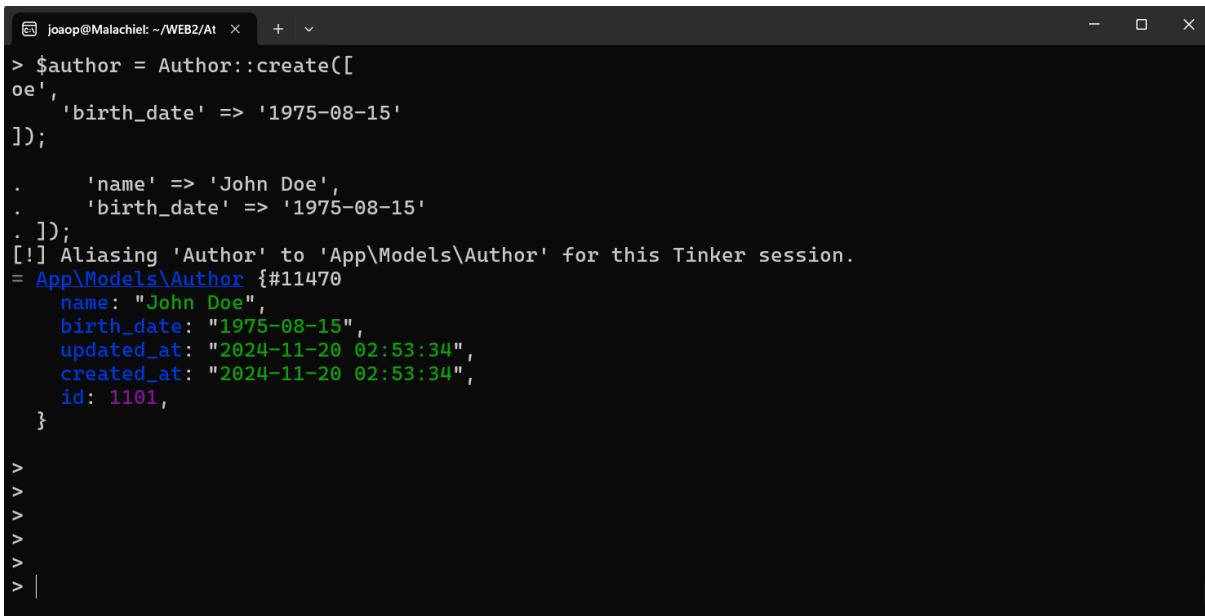
> echo "Tempo total para Eager Loading: {$tempoTotalEager} segundos\n";
Tempo total para Eager Loading: 0.0816490650177 segundos
>
> |
```



Comando:

```
$author = Author::create([
    'name' => 'John Doe',
    'birth_date' => '1975-08-15'
]);
```

Resultado:



```
joaop@Malachiet: ~/WEB2/At  x + v
> $author = Author::create([
oe', 'birth_date' => '1975-08-15'
]);
.      'name' => 'John Doe',
.      'birth_date' => '1975-08-15'
.  ]];
[!] Aliasing 'Author' to 'App\Models\Author' for this Tinker session.
= App\Models\Author {#11470
  name: "John Doe",
  birth_date: "1975-08-15",
  updated_at: "2024-11-20 02:53:34",
  created_at: "2024-11-20 02:53:34",
  id: 1101,
}
>
>
>
>
>
>
> |
```

Comando:

```
$category = Category::create([
    'name' => 'Fiction'
]);
```

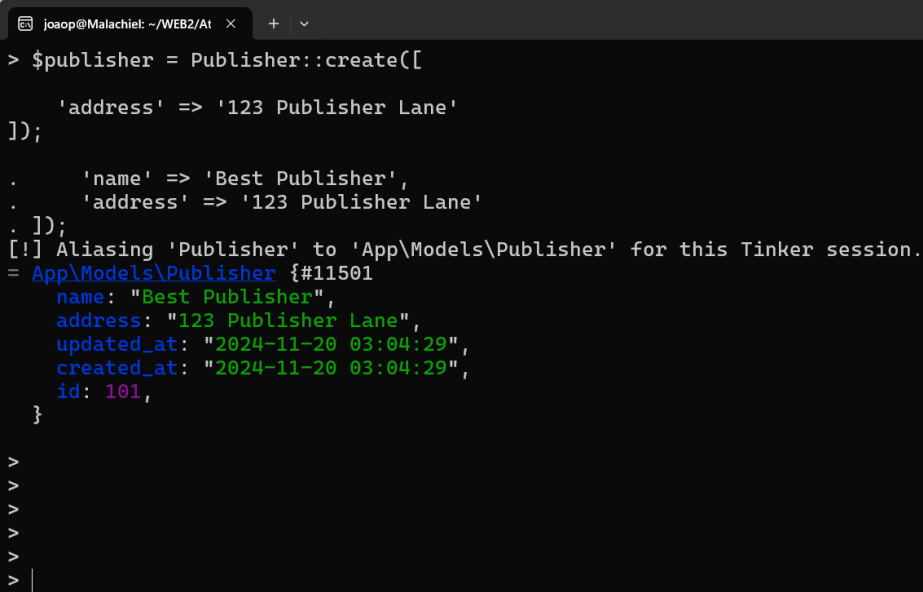
Resultado:

```
joaop@Malachiel: ~/WEB2/At  ×  +  ∨  
> $category = Category::create([  
  .   'name' => 'Fiction'  
  . ]);  
= App\Models\Category {#11467  
  name: "Fiction",  
  updated_at: "2024-11-20 02:55:00",  
  created_at: "2024-11-20 02:55:00",  
  id: 11,  
}
```

Comando:

```
$publisher = Publisher::create([
    'name' => 'Best Publisher',
    'address' => '123 Publisher Lane'
]);
```

Resultado:



```
joaop@Malachiet: ~/WEB2/At x + v
> $publisher = Publisher::create([
    'address' => '123 Publisher Lane'
]);
.
.
.
.
[!] Aliasing 'Publisher' to 'App\Models\Publisher' for this Tinker session.
= App\Models\Publisher {#11501
    name: "Best Publisher",
    address: "123 Publisher Lane",
    updated_at: "2024-11-20 03:04:29",
    created_at: "2024-11-20 03:04:29",
    id: 101,
}
>
>
>
>
>
>
> |
```

Comando:

```
$book = Book::create([
    'title' => 'The Great Adventure',
    'author_id' => $author->id,
    'category_id' => $category->id,
    'publisher_id' => $publisher->id,
    'published_year' => 2024
]);
```

Resultado:

```
> $book = Book::create([
$author->id,
    'category_id' => $category->id,
    'publisher_id' => $publisher->id,
    'published_year' => 2024
]);

.    'title' => 'The Great Adventure',
.    'author_id' => $author->id,
.    'category_id' => $category->id,
.    'publisher_id' => $publisher->id,
.    'published_year' => 2024
. ];
= App\Models\Book {#8289
    title: "The Great Adventure",
    author_id: 1101,
    category_id: 11,
    publisher_id: 101,
    published_year: 2024,
    updated_at: "2024-11-20 03:05:56",
    created_at: "2024-11-20 03:05:56",
    id: 1001,
}
```

Comando:

```
echo "Livro: {$book->title}\n";
```

```
echo "Autor: {$book->author->name}\n";
```

```
echo "Categoria: {$book->category->name}\n";
```

```
echo "Editora: {$book->publisher->name}\n";
```

Resultado:

[illegible]