Quiz 04 Review

Announcements

- **EX05: River Simulation** due Monday at 11:59pm

```
1  from __future__ import annotations
2
3  class Node:
4    value: int
5    next: Node | None
6
7    def __init__(self, value: int, next: Node | None):
8      self.value = value
9      self.next = next
10
11   def __str__(self) -> str:
12     rest: str
13     if self.next is None:
14       rest = "None"
15     else:
16       rest = str(self.next)
17     return f"{self.value} -> {rest}"
18
19 pluto: Node = Node(22, None)
20 neptune: Node = Node(15, pluto)
```

5.1. Print the output.

```
1 print(neptune)
```

5.2. Print the output.

```
1 print(pluto.value)
```

5.3. Print the output.

```
1 print(neptune.next)
```

5.4. Print the output.

```
1 print(neptune.next.next)
```

Create a Book class that represents a book in a library system. Your class should include:

Attributes:

- title (string): The book's title
- author (string): The book's author
- pages (integer): Total number of pages
- is_checked_out (boolean): Whether the book is currently checked out

Methods:

- __init__(self, title: str, author: str, pages: int): Constructor that initializes the book. Set is_checked_out to False by default.
- check_out(self): Marks the book as checked out
- return_book(self): Marks the book as available
- get_reading_time(self): Estimates reading time assuming 250 words per page and 200 words per minute
- __str__(self): Returns a formatted string with the book's information