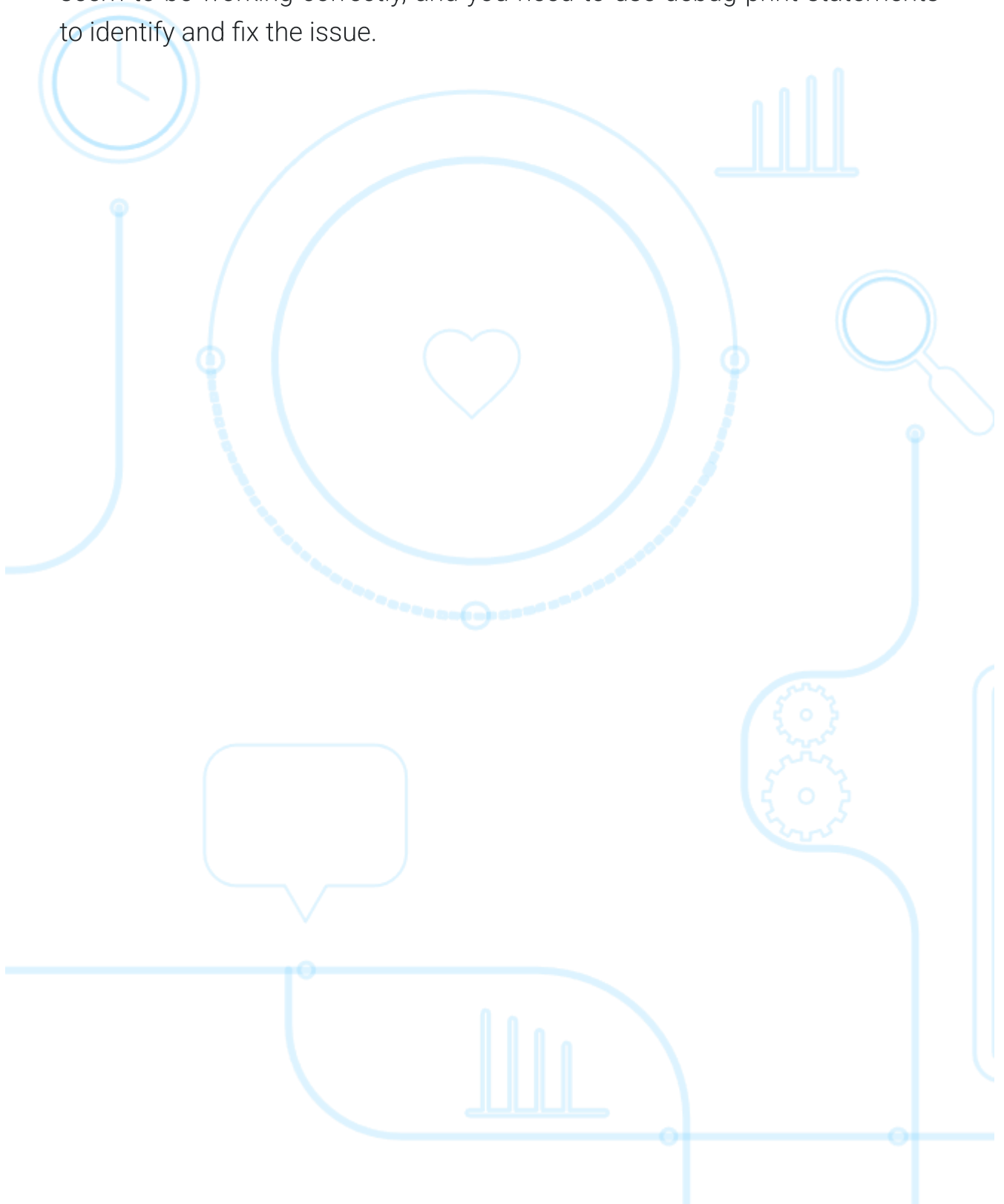# Debug Prints

You are a software developer working on a project for a bookstore. The bookstore wants to manage its inventory by removing books from specific authors. You have been given a piece of code that attempts to remove all books by a specified author from the inventory. However, the code doesn't seem to be working correctly, and you need to use debug print statements to identify and fix the issue.

Steps

1. Use the provided code in the `debug_prints.py` file:

```python
def                remove_books_by_author(inventory,
author_to_remove):
    """
    Attempts to remove all books by a specified
author from the inventory.

    Parameters:
     - inventory: List of dictionaries, where
each dictionary represents a book with 'title'
and 'author'.
     - author_to_remove: String, the name of the
author whose books should be removed.
    """
    for index in range(len(inventory)):
            if inventory[index]['author'] ==
author_to_remove:
            del inventory[index]
    return inventory


# Example inventory with more realistic book
titles
inventory = [
    {'title': 'Shadows of Tomorrow', 'author':
'John Doe'},
    {'title': 'The Last Chronicle', 'author':
'Jane Smith'},
    {'title': 'Echoes of the Past', 'author':
'John Doe'},
    {'title': 'The Silent Forest', 'author':
'Emily Jones'},
    {'title': 'Beyond the Horizon', 'author':
'John Doe'},
        {'title': 'Whispers of the Ancient',
'author': 'John Doe'},
    {'title': 'Under the Moonlight', 'author':
'Michael Brown'}
]
```

```python
# Author to remove
author_to_remove = 'John Doe'

# Attempt to remove books by the specified
author
updated_inventory                        =
remove_books_by_author(inventory,
author_to_remove)

print("Updated Inventory:")
for book in updated_inventory:
            print(f"-    {book['title']}    by
{book['author']}")
```

2. Run the script and observe the output. You should notice that the
   script terminates prematurely with an error.

3. Add debug print statements at strategic locations in the code to help
   identify the issue:

   ○ Print the `index` and `len(inventory)` inside the loop to track
     the iteration.

   ○ Print the `inventory` after each book removal.

   ○ Make sure your prints are clear and not confusing:

     ■ For example - use `print(f"Index: {index}")` instead
       of just `print(index)`.

4. Run the script again and analyze the debug print output. Look for any
   unexpected behavior or clues that can help you identify the problem.

5. Based on the debug print output, identify the issue in the code and
   make the necessary fixes.

6. After fixing the issue, remove the debug print statements and run the script again to verify that the books by the specified author are being removed correctly.

To submit

Submit your debugged and functional code in a python script named `debug_prints.py` file along with a brief explanation of the issue you identified and how you fixed it.