Section 1: Debugging Techniques

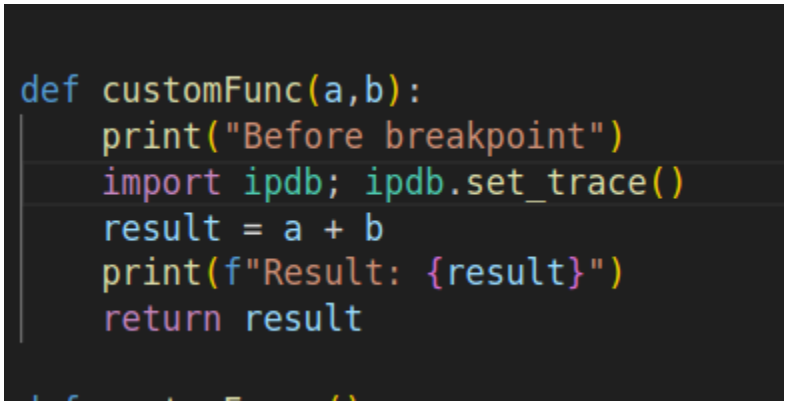
Using `ipdb` for Debugging in Frappe

Step-by-Step Guide

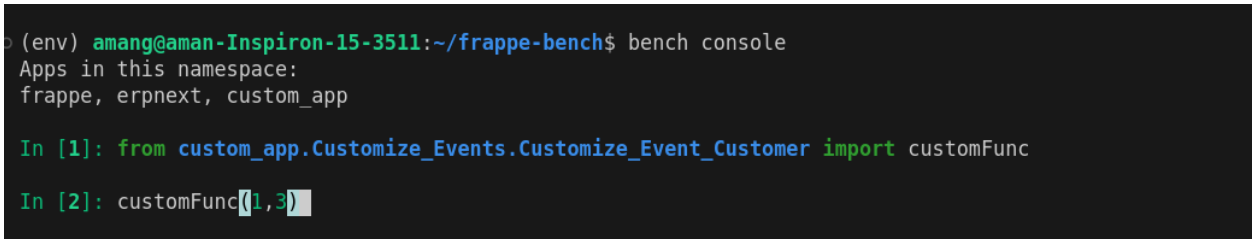
Install `ipdb`: Make sure `ipdb` is installed in your development environment. You can install it using pip:
bash
Copy code

```
pip install ipdb
```

1. **Insert Breakpoint in Code**: Add the following line in your Python code where you want to start debugging:
   python
   Copy code
   ```
   import ipdb; ipdb.set_trace()
   ```
2. This line will pause the execution and open the interactive debugging prompt when reached.
3. **Trigger the Code**: Run the part of your application that will hit the breakpoint. This could be a function call, an HTTP request, or any event that executes the code containing the breakpoint.



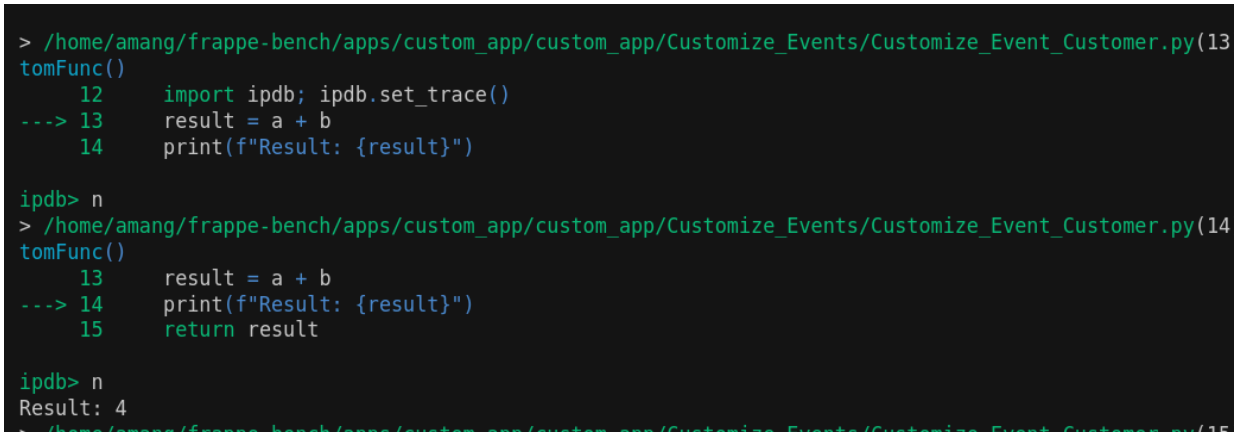
```
def customFunc(a,b):
    print("Before breakpoint")
    import ipdb; ipdb.set_trace()
    result = a + b
    print(f"Result: {result}")
    return result
```



```
(env) amang@aman-Inspiron-15-3511:~/frappe-bench$ bench console
Apps in this namespace:
frappe, erpnext, custom_app

In [1]: from custom_app.Customize_Events.Customize_Event_Customer import customFunc

In [2]: customFunc(1,3)
```



Debugging Client Scripts:

Debugging Client-Side Scripts

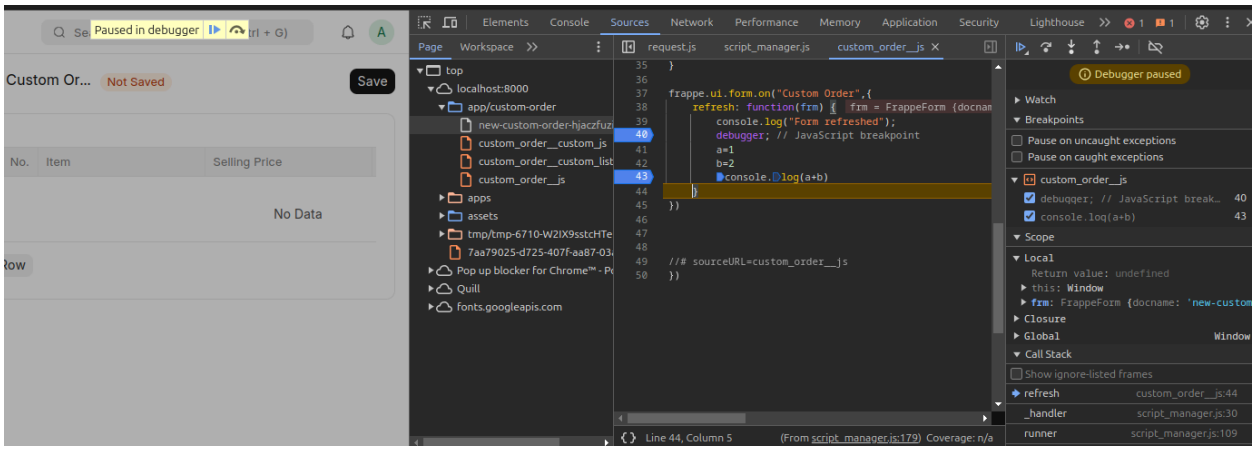
Using Browser Developer Tools

1. **Open Developer Tools**:
   - In most browsers, you can open the developer tools by pressing `F12` or by right-clicking on the page and selecting "Inspect".
2. **Inspect Elements**:
   - Navigate to the "Elements" tab to inspect the HTML structure of your Frappe app.
   - This allows you to see the DOM (Document Object Model) and understand how your elements are structured.
3. **View Console Output**:
   - Go to the "Console" tab to see the output of `console.log()` statements and any errors or warnings.
   - This is useful for understanding what is happening in your script at runtime.
4. **Set Breakpoints in JavaScript**:
   - Navigate to the "Sources" tab.
   - Locate your JavaScript file. In Frappe, this might be under the `webpack://` or an app-specific path.
   - Click on the line number to set a breakpoint.

Example

Consider you have a custom client script in Frappe:

```
frappe.ui.form.on('Custom Order', {
    refresh: function(frm) {
        console.log("Form refreshed");
        debugger; // JavaScript breakpoint
    }
});
```



Section 2: Error Logs
Custom Error Logging:

```
def customError():
    try:
        a=1/0
        print(a)
    except Exception as e:
        frappe.log_error("Can't Divided By 0")
```

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS
python
(env) amang@aman-Inspiron-15-3511:~/frappe-bench$ bench console
Apps in this namespace:
frappe, erpnext, custom_app

In [1]: from custom_app.Customize_Events.Customize_Event_Customer import customError

In [2]: customError()

In [3]:
```

Accessing Error Logs:

Section 3: Console Output