**Test Results for Financial Chatbot**

**Date:** 27 February, 2025  
**Tester:** Ravleen Kaur Chaudhery

**Test Case 1: Basic Query Matching**

📝 **Query:** What is Microsoft’s total revenue?  
🔍 **Expected Output:** Microsoft's total revenue for 2024 is $245.1 billion.  
✅ **Actual Output:** Microsoft's total revenue for 2024 is $245.1 billion.  
**Result:** ✅ **Pass**

**Test Case 2: Alternative Wording**

📝 **Query:** Tell me about Tesla’s revenue in 2024?  
🔍 **Expected Output:** Tesla's total revenue for 2024 is $97.69 billion.  
✅ **Actual Output:** Tesla's total revenue for 2024 is $97.69 billion.  
**Result:** ✅ **Pass**

**Test Case 3: Slightly Different Input (Testing Robustness)**

📝 **Query:** Can you give me Tesla's net income details?  
🔍 **Expected Output:** Tesla's net income decreased from $14.97 billion in 2023 to $7.15 billion in 2024.  
✅ **Actual Output:** Tesla's net income decreased from $14.97 billion in 2023 to $7.15 billion in 2024.  
**Result:** ✅ **Pass**

**Test Case 4: Handling Case Sensitivity**

📝 **Query:** MICROSOFT CASH FLOW?  
🔍 **Expected Output:** Microsoft's cash flow from operations in 2024 is $118.5 billion.  
✅ **Actual Output:** Microsoft's cash flow from operations in 2024 is $118.5 billion.  
**Result:** ✅ **Pass**

**Test Case 5: Slight Misspellings / Typo Handling**

📝 **Query:** Tell me Microsft revenue  
🔍 **Expected Output:** Microsoft's total revenue for 2024 is $245.1 billion. (if close match detection works)  
✅ **Actual Output:** Microsoft's total revenue for 2024 is $245.1 billion.  
**Result:** ✅ **Pass**

**Test Case 6: Unsupported Query Handling**

📝 **Query:** How much profit did Google make?  
🔍 **Expected Output:** "Sorry, I can only provide information on predefined financial queries. Try asking about revenue, net income, debt ratio, cash flow, or financial health for Microsoft or Tesla."  
✅ **Actual Output:** "Sorry, I can only provide information on predefined financial queries. Try asking about revenue, net income, debt ratio, cash flow, or financial health for Microsoft or Tesla."  
**Result:** ✅ **Pass**

**Test Case 7: Unclear / Incomplete Query**

📝 **Query:** How’s Tesla doing?  
🔍 **Expected Output:** "Sorry, I can only provide information on predefined financial queries."  
✅ **Actual Output:** "Sorry, I can only provide information on predefined financial queries."  
**Result:** ✅ **Pass**

**Test Case 8: Alternative Query Format**

📝 **Query:** Tesla financial condition 2024  
🔍 **Expected Output:** Tesla's financials show declining net income, indicating potential cost pressures or market slowdowns.  
✅ **Actual Output:** Tesla's financials show declining net income, indicating potential cost pressures or market slowdowns.  
**Result:** ✅ **Pass**

**Test Case 9: Asking for Debt Ratio Differently**

📝 **Query:** Does Microsoft have a high debt ratio?  
🔍 **Expected Output:** Microsoft's debt ratio is approximately 47.6% (Total Liabilities / Total Assets).  
✅ **Actual Output:** Microsoft's debt ratio is approximately 47.6% (Total Liabilities / Total Assets).  
**Result:** ✅ **Pass**

📌 **Final Summary:**

* **✔️ The chatbot successfully handled various ways of asking the same question.**
* **✔️ It correctly matched similar queries with minor spelling mistakes.**
* **✔️ It responded properly to unsupported questions.**
* **⚠️ Potential improvement:** Handling more flexible phrasing beyond exact keywords.

✅ **Overall, the chatbot is functional!**