The HMI File (NX4024K032):
speedometer_test.HMI

Project Explanation (not a school project or assignment, I just want to make something that costs 80 dollars function by displaying values from Arduino sensors as some kind of hobby project)

What I've been able to make it do (it works so TX1 RX1 pins are not at fault; it does have the potential to communicate but not through the usual means, I think), Arduino able to read hex notification that button is pushed on Nextion device:

```
void setup() {
  Serial.begin(9600);       // Initialize Serial Monitor communication
  Serial1.begin(9600);      // Initialize Nextion communication on Serial1
  delay(1000);              // Wait for Nextion to start up

  Serial.println("Arduino ready. Type a message to send to the Nextion:");
}

void loop() {
  // Check if there's data from the Serial Monitor (PC)
  if (Serial.available()) {
    String message = Serial.readString();

    // Send the message to Nextion via Serial1
    Serial1.print(message);    // Sends message to Nextion
    Serial1.write(0xFF);       // Send Nextion terminator
    Serial1.write(0xFF);
    Serial1.write(0xFF);

    // Print the message sent
    Serial.println("Sent to Nextion: " + message);
  }

  // Check if there's data from the Nextion
  if (Serial1.available()) {
    Serial.println("Received from Nextion (in HEX):");

    // Read and print data in hexadecimal format
    while (Serial1.available()) {
      int byteReceived = Serial1.read();  // Read each byte
```

```
      Serial.print("0x");
      if (byteReceived < 0x10) {
        Serial.print("0");  // Add leading zero for single-digit hex
values
      }
      Serial.print(byteReceived, HEX);    // Print byte as a 2-digit hex
value
      Serial.print(" ");                  // Separate bytes with a space
    }
    Serial.println();  // Add a new line after printing all bytes
  }

  // Small delay to avoid spamming
  delay(100);
}
```