Criteria: a peer should be able to reproduce the same results with the same equipment.

Lab partner:  
Objective:  
Equipment:

<table>
<thead>
<tr>
<th>Function</th>
<th>Make</th>
<th>Model</th>
<th>ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital Multimeter</td>
<td>Fluke 8050A</td>
<td>EE4089 (or serial number)</td>
<td></td>
</tr>
</tbody>
</table>

Decade Resistance Box: Leeds & Northrup (1-10kΩ) no serial number

Procedure:
Circuit diagram for all measurements

\[
\text{HP3311A} \quad V \quad + \quad R_1 \quad - \quad \text{Unknown} \quad V_0 \quad - \quad R_2
\]

\[
\text{HP3321} \quad V \quad (V) \quad V_0 \quad (V) \quad V_0 \quad (V) \quad I_0 \quad (mA) \quad R_2 \quad (k\Omega)
\]

| Value | 20 | 10 | 10 | 10 | 1 |

---

Sample calculations:

\[
I_0 = \frac{V_0}{R_2} = \frac{10V}{1k\Omega} = 10 \text{ mA}
\]

\[
R_2 = \frac{V_0}{I_0} = \frac{10V}{10\text{mA}} = 1 k\Omega
\]

Figures:

<table>
<thead>
<tr>
<th>Output Current, ( I_0 ) (mA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
</tr>
<tr>
<td>2</td>
</tr>
</tbody>
</table>

\[\text{Figure 1 Output Current Characteristics}\]

\[\text{NOTE: } R_2 = 1 k\Omega\]

State what you did, note any problems or special conditions.

Conclusions: state results with respect to objective. Explain any discrepancies, and discuss any problems.

Any conclusions learned from experience format should be a thoughtful, reflective paragraph.

Note: answer all questions in procedure section using lab manual numbering.