About how many hours did you spend actively working on this assignment? _____

<table>
<thead>
<tr>
<th>1a. Message decoded from T-shirt:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>1b. Explain your steps for decoding the T-shirt message:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>2a. Unicode code points decoded from 7-byte message:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>2b. Explain your steps for decoding the Unicode message:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>2c. What would the message look like in a Unicode enabled application?</th>
</tr>
</thead>
</table>
3a. Truth Table

3b. Karnaugh Map

1c. Minimal sum of products expression:

\[ F(A,B,C,D) = \]
4. Switching Network

A

B

S

C

D

5. Draw circuits on next page, text answers here.

5b. Result =

5c. (Brief!)

5c(i) Sign bit of A-B gives **correct result** for A<B.
   Example:
   
   \[
   \begin{array}{c}
   A = \\
   B = \\
   \end{array}
   \]

5c(ii) Sign bit of A-B gives **incorrect result** for A<B.
   Example:
   
   \[
   \begin{array}{c}
   A = \\
   B = \\
   \end{array}
   \]
   Reason:

Other parts of 5 will be drawn on the following page.
5a(i-iv) Condition Flags, 5c(iii) Less-Than Flag, 5d Equals Flag. **Label outputs clearly.**