1. (4 points)
   Code the statement $A = (B + C) * D$ in assembly language on the following types of architectures:

   (a) 3-operand memory-to-memory

   # Assuming destination operand is last
   ADD B, C, A
   MUL A, D, A

   (b) 2-operand register-memory

   # Assuming destination operand is last
   MOVE B, R0
   ADD C, R0
   MUL D, R0
   MOVE R0, A

2. (6 points)
   What is the effective address of the first operand in each of the following statements, assuming the syntax given in table 8-6?

   add x, r10 1000
   add @y, r10 1000
   add (r1), r10 1004
   add 100(r0), r10 2198
   add (r0)+, r10 2098
   add r1, r10 No address: Operand is in r1

   --------------------------------------
<table>
<thead>
<tr>
<th>Address</th>
<th>Contents</th>
<th>Variable</th>
<th>Register</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000</td>
<td>1008</td>
<td>x</td>
<td>r0</td>
<td>2098</td>
</tr>
<tr>
<td>1004</td>
<td>1000</td>
<td>y</td>
<td>r1</td>
<td>1004</td>
</tr>
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