

The tables below show the current contents of the register file and of the scratch pad memory.

```
.CSEG
.ORG      0x29

label: ADD    R1, R2    C=1 C=0
        BRCS   label
        ST     R5, (R5)
        LD     R31, (R3)
        XOR    R30, R29  not zero
        BREQ   end:
        LD     R4, 0xFE
end:     ADD    R0, 0x00
```

Modify the register and scratch pad memory contents that result from executing the program.

<table> <tr><td>0</td><td>0x04 0x04</td></tr> <tr><td>1</td><td>0xF1 0x00</td></tr> <tr><td>2</td><td>0x0F</td></tr> <tr><td>3</td><td>0x00</td></tr> <tr><td>4</td><td>0x02 0x28</td></tr> <tr><td>5</td><td>0x11</td></tr> <tr><td>...</td><td></td></tr> <tr><td>29</td><td>0x98</td></tr> <tr><td>30</td><td>0x32 0xAA</td></tr> <tr><td>31</td><td>0x98 0x23</td></tr> </table> <p>Register File</p>	0	0x04 0x04	1	0xF1 0x00	2	0x0F	3	0x00	4	0x02 0x28	5	0x11	...		29	0x98	30	0x32 0xAA	31	0x98 0x23	<table> <tr><td>0</td><td>0x23</td></tr> <tr><td>1</td><td>0x11</td></tr> <tr><td>...</td><td></td></tr> <tr><td>16</td><td>0x1F</td></tr> <tr><td>17</td><td>0x54 0x11</td></tr> <tr><td>18</td><td>0x99</td></tr> <tr><td>...</td><td></td></tr> <tr><td>253</td><td>0x0B</td></tr> <tr><td>254</td><td>0x28</td></tr> <tr><td>255</td><td>0x54</td></tr> </table> <p>Scratch Pad Memory</p>	0	0x23	1	0x11	...		16	0x1F	17	0x54 0x11	18	0x99	...		253	0x0B	254	0x28	255	0x54
0	0x04 0x04																																								
1	0xF1 0x00																																								
2	0x0F																																								
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4	0x02 0x28																																								
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...																																									
253	0x0B																																								
254	0x28																																								
255	0x54																																								

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R30  0011 0010
R29  1001 1000
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      10101010

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