You may NOT use a calculator. You will be provided with Table 20 out of the PIC18 datasheet. Assume the following memory/register contents at the beginning of each instruction:

<table>
<thead>
<tr>
<th>Location</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>0x037</td>
<td>0x38</td>
</tr>
<tr>
<td>0x038</td>
<td>0xC7</td>
</tr>
<tr>
<td>0x039</td>
<td>0x9B</td>
</tr>
<tr>
<td>0x03A</td>
<td>0xFE</td>
</tr>
</tbody>
</table>

a. (2 pts) iorwf 0x37, f.

b. (2 pts) bsf 0x39, 6

c. (3 pts) Fill in the blanks below

```c
unsigned char i, k;
if (i > k) {
    i++;
}
```

d. (3 pts) Write the following in PIC18 assembly.

```assembly
char k, j;

k = (k-j) >> 1
```

```assembly
movf j, w ; w = j
subwf k, f ; k = k-w
bcf STATUS, C ; clear carry before shift
rrcf k, f ; k = k >> 1
```