Answer the following questions in the space provided below (and on the back if needed).

You have **15 minutes**.

1. Consider the following function:

   ```c
   void update_var(struct mydev *dev)
   {
       unsigned long flags;
       spin_lock_irqsave(&dev->lock, flags);
       if (!dev->busy) {
           dev->a++;
           dev->b--;
       }
       spin_unlock_irqrestore(&dev->lock, flags);
   }
   ```

   `update_var()` is called from both process context and interrupt context. Are memory barriers needed? If so, where? If not, why?

2. Describe at least one step you have taken towards completion of your final project. For example, do you have an approach/plan to reaching your goal? Did you complete any initial short-term goals?