

Question 3:

A safe register is safe for reads that do not overlap writes, so I do not think this will satisfy mutual exclusion as the register will not hold up when two or more threads are trying to write to the same location. A regular register adds write overlaps. This means that read from an overlapping write can read different values and so are not mutually exclusive. I don't think wraparound registers would be safe either because, if on the chance that the register wraps, the reads will be significantly different.

Question 4:

This implementation is regular because a read will not take place until a writes are complete. This means that even though reads may not get the same value when read, they will still read non-corrupted data. I do not think this is atomic because reads to the same register do not guarantee reading the same value.