Question 1. FIFO control signals include write clock, read clock, write reset, read reset, full, programmable full and empty. The FIFO is configured to take two asynchronous clocks for the source and destination. And each side can be reset individually. Full and empty is the indicator for FIFO, and the programmable full is a signal that is asserted when a configured threshold is reached.

Question 2. FIFO overflow can happen when the reading operation is stalled on the python side, or the ready signal is not asserted correctly, or when data is being generated faster than the read operation.