Exercise 4

1. A 8 bit timer is counting 8 MHz clock pulses. How long it takes to get the maximum count if counting is started from the beginning?

2. A 16 bit counter is used a real time interrupt source for a microprocessor. It counts 12 MHz pulses. Define the initial value for this counter if the interrupt is repeated after 1ms and a processor gets an interrupt always when the maximum count is reached.

3. A 16 bit counter is used a real time interrupt source for a microprocessor. It counts 16 MHz pulses. Define the initial value for this counter if the interrupt is repeated after 1ms and a processor gets an interrupt always when the count is $F000_H$.