Derivation of initial value, number of iterations and prescale values for 100ms using TIMER0

XTAL = 16MHz → T_{xtal_clock} = 1/16 us

Prescaler = 1:256 → $T_{counter\_clock}$ = 256 x (1/16) us

                                                                              = 16us

Increment count   = 10000us / 16us

                                                                              = 625

Take 125 as the count

Number of iterations   = 625/125

                                                                              = 5

Initial counter value   = 256 – 125

                                                                              = 131