PR2:

Using this Formula : $Ppwm = (PR2 + 1) * 4 * Tosc * Prescaling\,factor$, where Pwm is the pwm period, Tosc is the oscillating time. We can compute PR2 since we have PWM frequency of **5000H**, **10MH** oscillating frequency, and **16** as prescaling factor.

$PR2 = \frac{Fosc}{Fpwm * 4 * Prescaling\,factor} - 1 = 30.25$ we can benefit from a lower prescaling factor to increase the accuracy so we can use **4** instead (i.e. **T2CON = 0b00000100**).

The new PR2 value will be **124**.

Now to run the program in the PWM mode we need to make CCP1CON register to be **$0b00001100_2 = 0C_{16}$** . And this will be the same for CCP2CON.

*** In part B, we must change the percentage where before it was **0.1 * 255** now it's **0.1 * 124** since the most we can get from the PR2.