

(٢)

$$\text{Duty cycle} = \frac{\text{onTime}}{\text{onTime} + \text{ofTime}} * 100 = \frac{80}{200} * 100 = 40\%$$

$$\text{Time} = \text{duty cycle} * \text{frequency} \Rightarrow \text{time} = 0.4 * 1/500 = 0.0008$$

$$\text{Value} = 80/200 * 255 = 102$$