$$P(z=W \mid x=W) = 0.75$$

$$\Rightarrow P(z=B \mid x=W) = 0.25$$

$$P(z=B \mid x=B) = 0.85$$

$$\Rightarrow P(z=W \mid x=B) = 0.15$$

some further formulation of the problem:

$$\left[bel(x_t)\right]_{17\times1} = \underbrace{\eta\left[p(z_t \mid x_t)\right]_{17\times1}}_{①} \overset{\text{elementwise}}{*} \left[\underbrace{\overline{bel}(x_t)}_{\text{already obtained through the prediction step}}\right]_{17\times1} \qquad (\text{Eq. A})$$

① The first step in each correction is to form the 17x1 vector of probabilities based on the current observation. Then calculate the normalization factor η with respect to the fact that the sum of all probabilities in an eventual belief must be equal to 1. That is:

$$\eta\left[p(z_t \mid x_t)\right]_{17\times1} \overset{\text{dot product}}{\cdot} \left[\overline{bel}(x_t)\right]_{17\times1} = 1 \quad \Rightarrow \quad \eta = \frac{1}{\left[p(z_t \mid x_t)\right]_{17\times1} \cdot \left[\overline{bel}(x_t)\right]_{17\times1}}$$

Then, we plug in the obtained η & the observation probability vector in (Eq. A) which results in the final $bel(x_t)$.