$$E(X) = \int_{0}^{1} x \left(x + \frac{1}{2}\right) dx = \int_{0}^{1} (x^{2} + \frac{x}{2}) dx = \left(\frac{x^{3}}{3} + \frac{x^{2}}{4}\right) \Big|_{0}^{1} = \frac{1}{3} + \frac{1}{4} = \frac{7}{12}$$

$$E(Y) = \int_{0}^{1} y \left(y + \frac{1}{2}\right) dy = \frac{7}{12}$$

$$Cov(X, Y) = \frac{1}{3} - \left(\frac{7}{12}\right) \left(\frac{7}{12}\right) = \frac{1}{3} - \frac{49}{144} = -\frac{1}{144} < 0 \implies X \text{ ve } Y \text{ ras. deg. leri}$$

$$(-) \text{ illiskilidic.}$$

$$X^{\uparrow} Y \downarrow , X \downarrow Y \uparrow$$