Assignment-4

EE22BTECH11012-A.Chhatrapati

Question 11.16.3.18)In a non-leap year, the probability of having 53 tuesdays or 53 wednesdays is
Solution: Non-leap year=365days
Since in a week 7 days are present,
365days=52weeks+1day

$$X = \begin{cases} 1, & \text{if that 1day is tuesday} \\ 0, & \text{otherwise} \end{cases} \quad (1)$$

$$Y = \begin{cases} 1, & \text{if that 1day is wednesday} \\ 0, & \text{otherwise} \end{cases}$$

$$(2)$$

$$p_X(1) + p_Y(1) = \frac{1}{7} + \frac{1}{7} \quad (3)$$

$$= \frac{2}{7} \quad (4)$$