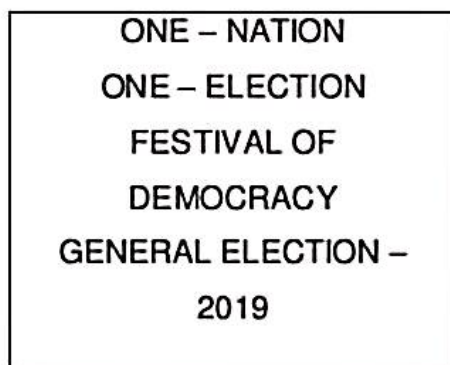


Relation and Function

CASE STUDY 1:

A general election of Lok Sabha is a gigantic exercise. About 911 million people were eligible to vote and voter turnout was about 67%, the highest ever



Let I be the set of all citizens of India who were eligible to exercise their voting right in general election held in 2019. A relation ' R ' is defined on I as follows:

$R = \{(V1, V2) : V1, V2 \in I \text{ and both use their voting right in general election – 2019}\}$

- Two neighbors X and $Y \in I$. X exercised his voting right while Y did not cast her vote in general election – 2019. Which of the following is true?
 - $(X, Y) \in R$
 - $(Y, X) \in R$
 - $(X, X) \notin R$
 - $(X, Y) \notin R$
- Mr. ' X ' and his wife ' W ' both exercised their voting right in general election -2019, Which of the following is true?
 - both (X, W) and $(W, X) \in R$
 - $(X, W) \in R$ but $(W, X) \notin R$
 - both (X, W) and $(W, X) \notin R$
 - $(W, X) \in R$ but $(X, W) \notin R$
- Three friends F_1 , F_2 and F_3 exercised their voting right in general election-2019, then which of the following is true?
 - $(F_1, F_2) \in R$, $(F_2, F_3) \in R$ and $(F_1, F_3) \in R$
 - $(F_1, F_2) \in R$, $(F_2, F_3) \in R$ and $(F_1, F_3) \notin R$
 - $(F_1, F_2) \in R$, $(F_2, F_2) \in R$ but $(F_3, F_3) \notin R$
 - $(F_1, F_2) \notin R$, $(F_2, F_3) \notin R$ and $(F_1, F_3) \notin R$