Example 1:

Let $A = \{1, 2, 3, 4\}$. Define a relation R on A by writing $(x, y) \in R$ if $x < y$. Then

$R = \{(1, 2), (1, 3), (1, 4), (2, 3), (2, 4), (3, 4)\}$.

Example 2:

let $A = \{1,2,3\}$ and $R = \{(1,2),(1,3),(3,2)\}$. Then R is a relation on A since it is asubset of $A \times A$ with respect to this relation:

$1R2, 1R3, 3R2$ but $(1,1) \notin R$ & $(2,1) \notin R$

The domain of R is $\{1,3\}$ and

The range of R is $\{2,3\}$

Example 3:

Let $A = \{1, 2, 3\}$. Define a relation R on A by writing $(x, y) \in R$, such that $a \geq b$, list the element of R

$aRb \leftrightarrow a \geq b$, $a, b \in A$

$\therefore R = \{(1,1),(2,1), (2,2), (3,1), (3,2), (3,3)\}$.