```
R is a reflexive relation
Problem le
         R is not a reflexive relation
Problem 2d
         R is a symmetric relation
Problem 2d
         R = \{(1, 2), (3, 3)\}
         R is not a symmetric relation
Problem 3d
         R is a transitive relation
Problem 3d
        R is not a transitive relation
Problem 4d
         R is not a equivalence relation
                 R is not reflexive
                 R is not symmetric
Problem 4e
         R is a equivalence relation
                 R is reflexive
                 R is transitive
                 R is symmetric
Problem 5e
         S = \{1, 2, 3, 4\}
         R is a poset relation
                 R is reflexive
                 R is transitive
                 R is antisymmetric
Problem 5f
         R is not a poset relation
                 R is reflexive
                 R is not transitive
                 R is not antisymmetric
```

Problem 1d