```
def is_reflexive(self, fr: FiniteRelation) -> bool:
 """ Return True if the relation is reflexive. """
```

### @abstractmethod

```
def is_irreflexive(self, fr: FiniteRelation) -> bool:
""" Return True if the relation is irreflexive. """
```

## @abstractmethod

```
def is_transitive(self, fr: FiniteRelation) -> bool:
""" Return True if the relation is transitive. """
```

# @abstractmethod

```
def is_symmetric(self, fr: FiniteRelation) -> bool:
 """ Return True if the relation is symmetric """
```

## @abstractmethod

```
def is_antisymmetric(self, fr: FiniteRelation) -> bool:
""" Return True if the relation is antisymmetric """
```

#### @abstractmethod

```
def is_asymmetric(self, fr: FiniteRelation) -> bool:
""" Return True if the relation is asymmetric """
```