Dirty Read

T1

TM1
We read the data
that is modified/created
by the active tx T2

dirty read

T2

TM0: T2 transaction has created/modified
the data of a table, and not commited.

TM2: rollback

Non-Repeatable Read

T1: isolation=REPEATABLE

TM1: Read an record R1

TM3: when we tried
reading the same record
R1, it has been modified
or may not exists at all

T2

TM2: The record R1 has been
modified/deleted comitted.

Phantom Read

T1: isolationLevel=SERIALIZABLE

TM1: Read N records of data
from an query

TM3: if we re-execute the same
query in fetching the data, the
records will not be same as
earlier "Phantom Read"

T2

TM2: we modified the records of data
that is read by T1 and comitted

ISOLATION	Dirty Read	Non-Repeatable Read	Phantom Read
READ UNCOMITTED	Y	Y	Y
READ COMITTED	N	Y	Y
REPEATABLE	N	N	Y
SERIALIZABLE	N	N	N