Q1. WHAT ARE "ACID" PROPERTIES?

**ACID PROPERTIES** : EVERY TRANSACTION SHOULD HAVE BELOW PROPERTIES:

1. **ATOMOCITY** - EVERY TRANSACTION SHOULD BE EXECUTED AS A SINGLE UNIT.

2. **CONSISTENCY** - A TRANSACTION SUCCESS OR FAILURE SHOULD NOT IMPACT STATE OF DATABASE.

3. **ISOLATION** - ONE TRANSACTION MAY OR MAY NOT DEPENDANT ON OTHER TRANSACTIONS.

4. **DURABILITY** - EVERY TRANSACTION THAT IS COMMITTED IS PERMENANT. FOREVER.

Q2. WHAT IS THE IMPACT OF OPEN TRANSACTIONS?

QUERY BLOCKING

Q3. WHAT IS QUERY BLOCKING?

THE QUERIES ON OTHER SESSIONS RUN FOREVER.

Q4. WHAT ARE "DIRTY READS" ?

THE DATA PERTIANNIG TO UNCOMMITTED / OPEN TRANSACTIONS

Q5. EXPLAIN LOCK HINTS. GIVE AN EXAMPLE ON HOW TO PREVENT LOCK HINTS.

LOCK HINTS ARE USED TO AVOID POSSIBLE QUERY BLOCKING AND DIRTY READS.

USE "LOCK HINTS" : NOLOCK & READPAST

BEGIN TRANSACTION T2

INSERT INTO Reservation VALUES ('EMI07', 21, 'ECO')

INSERT INTO Reservation VALUES ('EMI08', 22, 'ECO')

/\*

GO TO FILE > NEW > QUERY WITH CURRENT CONNECTION [CTRL + N] > THEN PASTE BELOW QUERY :

SELECT \* FROM Reservation1 -- WE OBSERVE QUERY BLOCKING. MEANS, QUERY RUNS FOREVER.

-- Go to Menu (Top) : Query > Cancel [Alt + Break]

SELECT \* FROM Reservation1 WITH (NOLOCK)

SELECT \* FROM Reservation1 WITH (READPAST)

\*/