Assignment

**Initial Knowledge Base (KB)**

1. P → Q
2. Q → ¬R

**1. TELL: Adding the new fact P**

The TELL operation appends the sentence P to the KB.  
After TELL(P), the KB becomes:

1. P → Q
2. Q → ¬R
3. P

**2. ASK: Querying the KB with “Will I go outside?” (symbol R)**

Step-by-step inference:

1. From P (sentence 3) and P → Q (sentence 1), apply Modus Ponens to derive Q.
2. From Q and Q → ¬R (sentence 2), apply Modus Ponens to derive ¬R.
3. ¬R means “I will not go outside,” so the truth value of R is False.

Therefore, ASK(R) returns **False**.