***Testing Plan***

**All statements in KB of form a ~> b.**

1. Tests for whether or not optimisations are more efficient over different numbers of ranks:

(uniform distribution, 2 statements in each rank)

4 KBs, 24 query sets.

* 1. For each number of ranks (3, 10, 50, 100), test with x rank KB, with queries with:
     1. All different antecedents. (i.e. all statements in KB)
     2. All same antecedents.
     3. Half repeated antecedents.
     4. All antecedents who become consistent in highest rank.
     5. All antecedents who become consistent in lowest rank.

1. Tests for whether or not optimisations are more efficient over different numbers of statements in ranks:

3 KBs, 18 query sets.

(uniform distribution, same number of ranks in kb (100))

* 1. For each number of statements in a rank (2, 5, 10), test 100 rank KB with queries with:
     1. All different antecedents. (i.e. all statements in KB)
     2. All same antecedents.
     3. Half repeated antecedents.
     4. All antecedents who become consistent in higher ranks.
     5. All antecedents who become consistent in lower ranks.

1. Tests for whether or not optimisations are more efficient given different distributions of statements over the ranks.

3 KBs, 18 query sets.

(Same number of ranks in kb (100))

* 1. For each distribution (uniform, normal, exponential), test 100 rank kb with queries with:
     1. All different antecedents. (i.e. all statements in KB)
     2. All same antecedents.
     3. Half repeated antecedents.
     4. All antecedents who become consistent in higher ranks.
     5. All antecedents who become consistent in lower ranks.