**1. Tính tổng từ 1 - N**

Predicates

Tong (integer, integer)

Clauses

Tong (S, 0):- write (S), !.

Tong (S, N):- S1 = S + N, N1 = N – 1,

Tong (S1, N1).

Goal

Write (“ Nhap N: “), readint (N),

Tong (0, N).

**2. Kiểm tra 1 số nguyên N là chẳn hay lẻ (đệ quy trực tiếp)**

Predicates

Kt (integer)

Clauses

Kt (0):- write (“So chan”), !.

Kt (1):- write (“So le”).

Kt (N):- N1=N-2,

Kt (N1).

Goal

Write (“Nhap N: “), readint (N), kt (N).

**3. Tính S = 1 + ½ + … +1/N, N>0**

Predicates

Tong (real, integer)

Clauses

Tong (S, 1):- write (S).

Tong (S, N):- N>0, S1 = S + (1/N), N = N – 1,

Tong (S1, N1); write (“N>0”).

Goal

Write (“Nhap n: “),readint (N),

Tong (0, N).

**4. Tính S = 12 + 22 + … + N2**

Predicates

Mu (integer, integer)

Tong (integer, integer)

Clauses

Mu (X, M):- M = X\*X.

Tong (1, 1):- !.

Tong (N, T):- N1 = N – 1, mu (N, M),

Tong (N1, T1), T = T1 + M.

Goal

Write (“ Nhap N: “), readint (N),

Tong (N, T), write (“KQ: “, T).

**5. Tính S = 1! + 2! + … + N!**

Predicates

gt (integer, integer)

Tong (integer, integer)

Clauses

Gt (1, 1).

gt (X, M):- X1 = X – 1, gt (X1, M1), M = M1\*X.

Tong (1, 1):- !.

Tong (N, T):- N1 = N – 1, gt (N, M),

Tong (N1, T1), T = T1 + M.

Goal

Write (“ Nhap N: “), readint (N),

Tong (N, T), write (“KQ: “, T).