First arder Logic - Inflementation

" Tehn is a human " (relate) named e-

Step 1: Y, or Y2 is a mariable of constant,

a) If y, or Y2 are identical. then rietertraphillis round proved " (1) Else if y, is a univalue ((1) latern ((x) named) . If a

. Her y 4, occurs in 42, then return FAILURE

· else noturn { (42/41)}.

" graM wal retal" (8 c) Else if 42 is a marriable (pressure, what) reverse · If U, occur in U, then return FAILURE,

· Else rieters of (prapy) grade under a site " ("

d) Else retion FAILURE ((priam, x) could) is [=

the initial Bredicale Symbol in Y (and 1/20 are not some, then FAILURE .

THE AND WE a different no (d) arguments, then FAILURE (

धिक् ५: Set substitution set to NIL

For i=1 to the number of claments in 4, det 5: a) Gall Unity function with the ith element the ith element it gitted Esta (Rigo, 4) 4/2. and put the result into S.

b) of S = failure, then returns Failure - Eats (Riga; Apple)

of SI S = NIL then do.

a) Apply 5 to the remaider of both 4 and 12.

b) SUBST = APPEND (S, SUBST).

Such 6: Return SUBST

| Enample: | |
|--|---|
|) "John is a human" -> Human (John) | order legic - Inflamentation |
| trader | y of 1/2 is a maniable of 10 |
| 1) " Every human in montability next . | laitedi seo y to y to |
| 1) " Every human in ! mortal let ment | e) Else of 4, is a valuable |
| in P2, then reboth FAILURE | . Hen y Y, bruin |
| Franks Land (U) | · else heburn f (4 |
| , word hours littly | |
| → Lover (John, Marry) Lever (John, Marry) Lever (John, Marry) | · J. W. Eury in |
| 1) "There is someone who loves may | y M. ruter s. 7. |
| -> Ix (Loves (x, mary)). | |
| | 32001H: 100001 2017 (- |
| "All dogs are asmal" | |
|)"All dogs are assimpli" > 4 × (dogs (2) = arinal(2))! is s | : If the initial Reducal Synder |
| | FAILURE . |
| "Some dons are brown" | and the policy of the state of |
| "Some dons are brown" 72 USI AT North, Horamusaru (x)) an: | : If It and It have a different |
| | -in a see namement top : |
| Unification and Hi Eats (12. Athles and Hi Eats (Rigar, y) | to be runder of d |
| Eds (River 4) | a) call bily protess with the |
| J. J. C. Company Mari | y, and full the tradult lette |
| - Eats (Rigo, Apple) | to of S = failure, then redorns |
| | ab and i |
| los of lubb. It and It. | of of 2 × 111 2 to the source |
| 80837). | b) SUBSTE APPEND (S, |

life: Rebon SURST

148-3 3/12/24 Code -

Enter a sentence similar to writy:

i) John. is a human

2) Every humanistismmeritalist of enaposes that at national no by since a site

3) Tohn which manys and lettern ends out, aircond & green no, A hautent i 4) There exists someone who loves Mary

do prove - Robert is buried.

Enter a sentence: john in mordal

First Order Logic Translation: M (john)

Entry; many loves johnstitud 1 (1, p, q) eller 1 (p) reface 1 (q) raintents

First Order Logic Franklation: L (many, john) (x) stikin 1 (x, A) woul x E

Introduce TI:

Forward Chairing

(IT, A) bruso Missile (TI)

Yx Misibe(x) 1 Quand (A, X) => Sells (Robert, X, A)

Missile (x) = Weapon (x)

 $\forall Eieny (x, Amorica) \Rightarrow Hortile(x)$

Mourison (What) is to be seened to be seened as

Enough (A) freshirs) many all mans were faircent (A) freshirs

· (Loward) (kolunt) ·· and the last of the section of the