

UCT31021 – PRACTICAL FOR ARTIFICIAL INTELLIGENCE
DEPARTMENT OF ICT
FACULTY OF TECHNOLOGY
SOUTH EASTERN UNIVERSITY OF SRI LANKA

Labsheet: 06

Aims: Cut in PROLOG

The cut in PROLOG, is a goal, written as !.

Task 1: Double step function.

Rule 1: *if* $X < 3$, *then* $Y = 0$

Rule 2: *if* $3 \leq X$ *and* $X < 6$, *then* $Y = 2$

Rule 3: *if* $6 \leq X$, *then* $Y = 4$

Task 2: Finding Maximum

$\max(X, Y, Max)$

where

$\max = X$ *if* $X \geq Y$ *and*

$\max = Y$ *if* $X < Y$

Task 3:

Create a knowledge base to find positive even numbers to the list.

Hint: Given number is X

If X is greater than zero and divisible by 2, then X is even number.

Task 4:

John is the parent of Julia. Peter is the parent of John, Noah, Amal, and Perera. Paul is the parent of Peter, Sara, Walker, and Tailor. A parent is an ancestor for the children. Moreover, children can have a parent and an ancestor as their ancestor.

Create a knowledge base with relevant facts to represent the description using cut.