lab - 8

Problem :-
(1) All birds can fly.
(2) Tweety is a bird
(3) Tweety can fly

Prove : Tweety can fly

Proof :

x : Bird

1) Give $\forall x (B(x) \rightarrow F(x))$
   (Premise : All birds can fly)

2) Given : B (tweety)
   (Premise : Tweety a bird)

3) universal Instantiation :
   From $\forall x (B(x) \rightarrow F(x))$
   we conclude B (Tweety) $\rightarrow$ F (Tweety)

4) modus ponens : From B (Tweety) (step 2) and
   B(Tweety) $\rightarrow$ F(Tweety) we conclude F(Tweety)

Conclusion

we have proved that Tweety can fly

Proceed

Output :

7

Tweety can fly

$\frac{8}{19/11/24}$