

```

⊢ ∀[P:ℙ]. ((P ∨ (¬P)) ⇒ (¬¬P) ⇒ P)
|
BY (UD THENA Auto)
|
[1]. P: ℙ
⊢ (P ∨ (¬P)) ⇒ (¬¬P) ⇒ P
|
BY RepeatFor 2 ((D 0 THENA Auto))
|
2. P ∨ (¬P)
3. ¬¬P
⊢ P
|
BY D 2
| \
| 2. P
| ⊢ P
| |
1 BY NthHyp 2
| \
| 2. ¬P
| ⊢ P
|
BY Unfold 'not' 3
|
3. (P ⇒ False) ⇒ False
⊢ P
|
BY D 3
| \
| ⊢ P ⇒ False
| |
1 BY (Unfold 'not' 2 THEN NthHyp 2)
| \
| 3. False
| ⊢ P
|
BY FalseHD 3

```

```

Extract: λf,g. case f of inl(p) => p | inr(np) => any (g np)
  where f : P ∨ (¬P)
        g : ¬¬P ≡ ((¬P) ⇒ False)
        p : P
        np : ¬P

```