```
decidable__nat  THM

⊢  ∀m,n:ℕ. Dec(m = n)  by Unab [‘decidable‘] THEN StrongAuto
|
1. m : ℕ
2. n : ℕ
⊢  m = n ∨ ¬m = n  by Decide (m = n) THEN StrongAuto
|
|\
| 1. m : ℕ
| 2. n : ℕ
| 3. m = n
| ⊢  m = n ∨ ¬m = n  by DLeft THEN StrongAuto
|
.\
. 1. m : ℕ
. 2. n : ℕ
. 3. ¬m = n
. ⊢  m = n ∨ ¬m = n  by DRight THEN StrongAuto
. |
. 1. m : ℕ
. 2. n : ℕ
. 3. ¬m = n
. ⊢  ¬m = n
.   by Analyze 0 THEN StrongAuto THEN Analyze 3 THEN StrongAuto
END
```