

Some Class  
Random Examples  
Your Name

# 1 Hallo

## Lemma 1.1: Testing

Hallo

## Definition 1.1: Konjunktive und Disjunktive Normalform

Hallo

```
1 printf("Hallo World");
```

Listing 1: Hallo

```
1 print("Hallo World");
```

Listing 2: Hallo

## Theorem 1.1: Theorem

proof rules MT,  $\neg\neg$ i, PBC and LEM are derivable from other (basic) proof rules

## Proof 1.1: Proof

1.	$p \rightarrow q$	premise
2.	$r \rightarrow p$	assumption
3.	$r$	assumption
4.	$p$	$\rightarrow$ e: 2,3
5.	$q$	$\rightarrow$ e: 1, 4
6.	$r \rightarrow q$	$\rightarrow$ i : 4, 5
7.	$r \rightarrow p \rightarrow r \rightarrow q$	$\rightarrow$ i 3-5

## Example 1.1

formulap  $\rightarrow q \rightarrow p \rightarrow p$  is valid

## Proof 1.2: Proof

	$q_1$	$q_1$	$\overline{q_1}$	$\overline{q_1}$
X	0	D	0	0
$\overline{X}$	0	D	1	0
	$\overline{q_0}$	$q_0$	$q_0$	$\overline{q_0}$