Convolution

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Kodierer Information

- Nicht-Rekursiver Kodierer
- Anzahl von Ausgängen :

$$N = 2$$

- Anzahl von Registern :

$$M = 2$$

- Generatoren :

$$(7, 5)_8 = \begin{pmatrix} 111 \\ 101 \end{pmatrix}$$

- Kode-Rate:

$$\frac{1}{2}$$

Kodierer Matrix : Nächster Zustand

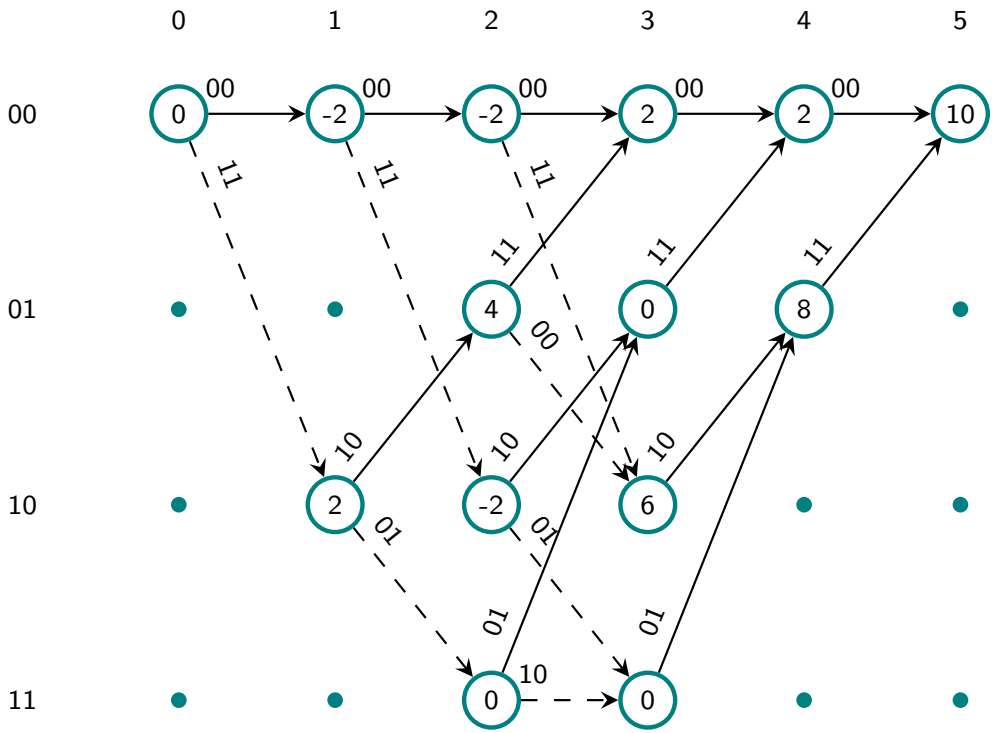
```
next.table <- next.state
colnames(next.table) <- c("Bit 0", "Bit 1")
row.counter <- rep(1:dim(next.table)[1])
rownames(next.table) <- paste("Zustand ", row.counter)
#knitr::kable(next.table, align="c")
```

Kodierer Matrix : Ausgangsbits

```
output.table <- output
output.table <- matrix(decToBin(as.vector(output.table)), ncol = ncol(output.tal
colnames(output.table) <- c("Bit 0", "Bit 1")
row.counter <- rep(1:dim(output.table)[1])
rownames(output.table) <- paste("Zustand ", row.counter)
#knitr::kable(output.table, align="c")
```

Trellis Diagram

input: (-3,-1.3,-0.3,2.7,-0.3,1.1,0.6,0.9,-1.2,-1)
hard input: (1,1,1,0,1,0,0,0,1,1)



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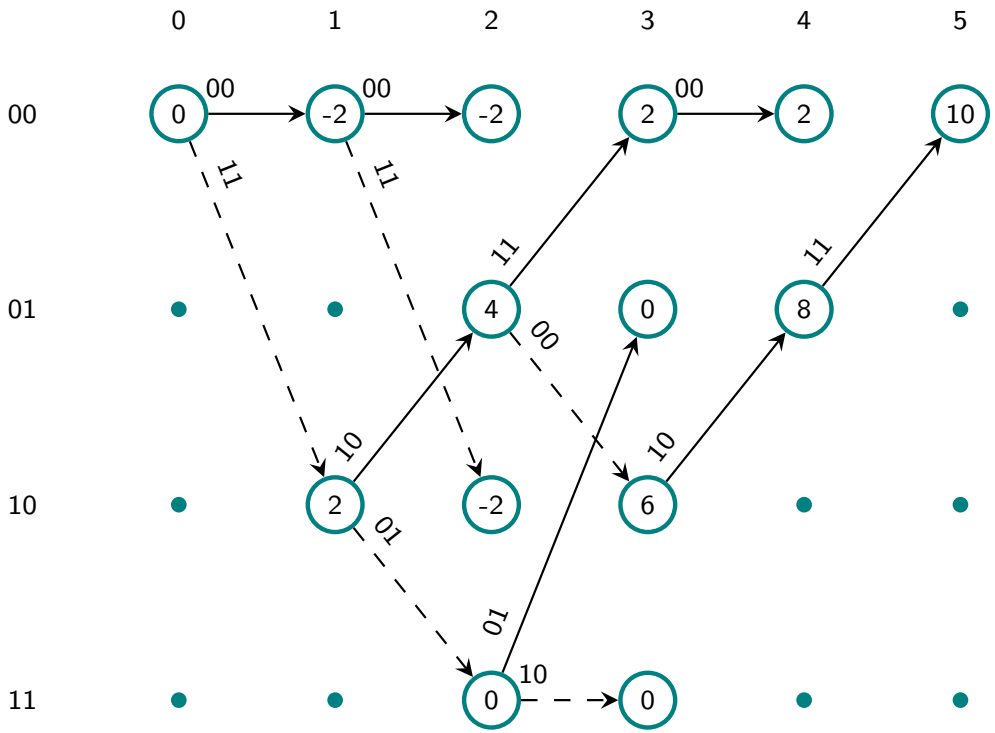
hard input: (1,1,1,0,1,0,0,0,1,1)



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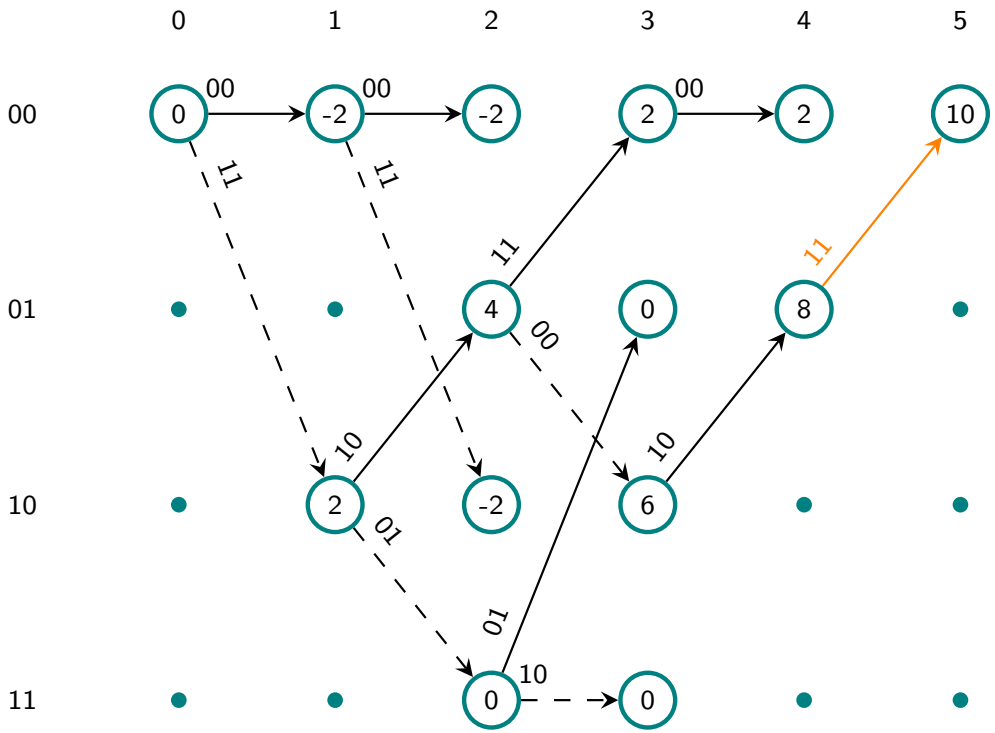
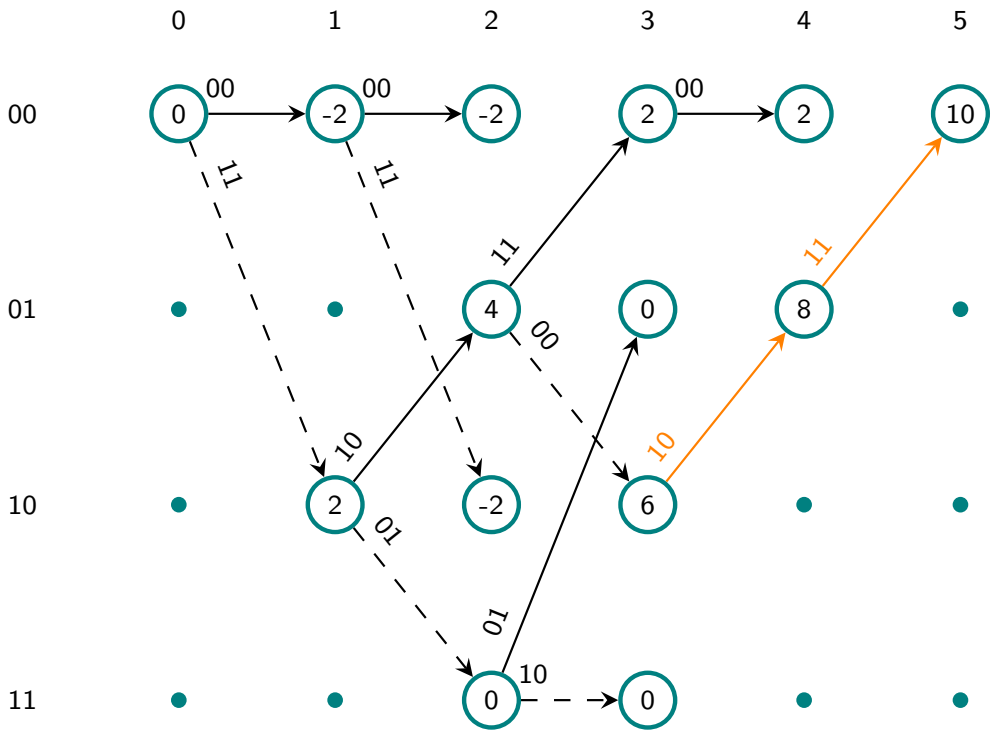
hard input: (1,1,1,0,1,0,0,0,1,1)



Trellis Diagram

input: (-3,-1.3,-0.3,2.7,-0.3,1.1,0.6,0.9,-1.2,-1)
hard input: (1,1,1,0,1,0,0,0,1,1)



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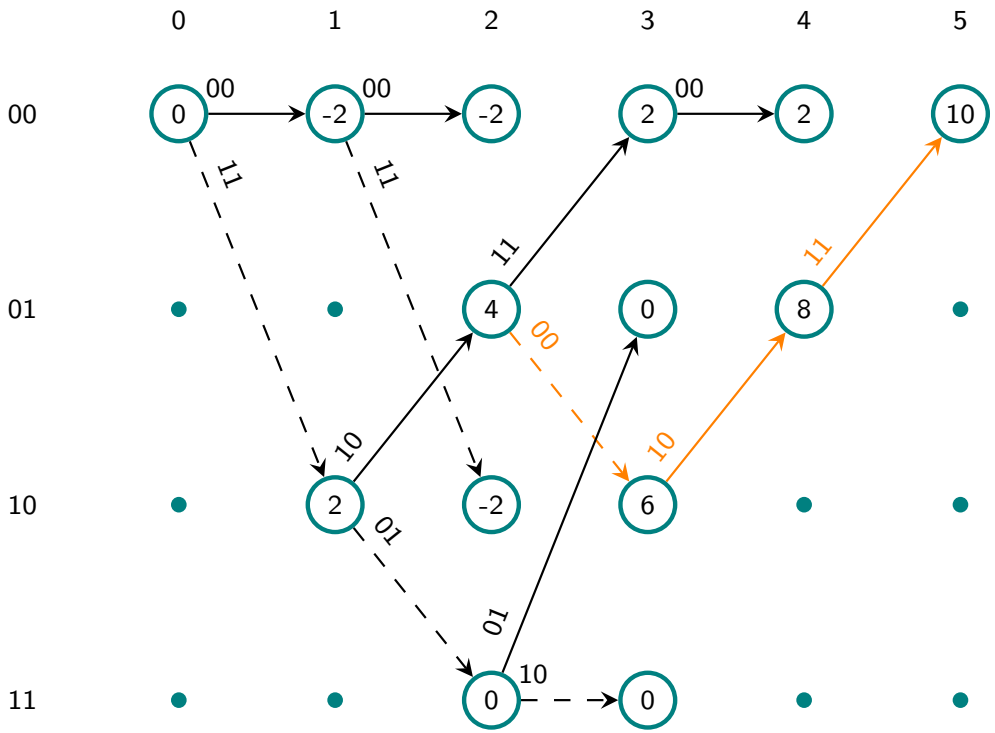
input: (-3,-1.3,-0.3,2.7,-0.3,1.1,0.6,0.9,-1.2,-1)
hard input: (1,1,1,0,1,0,0,0,1,1)



Trellis Diagram

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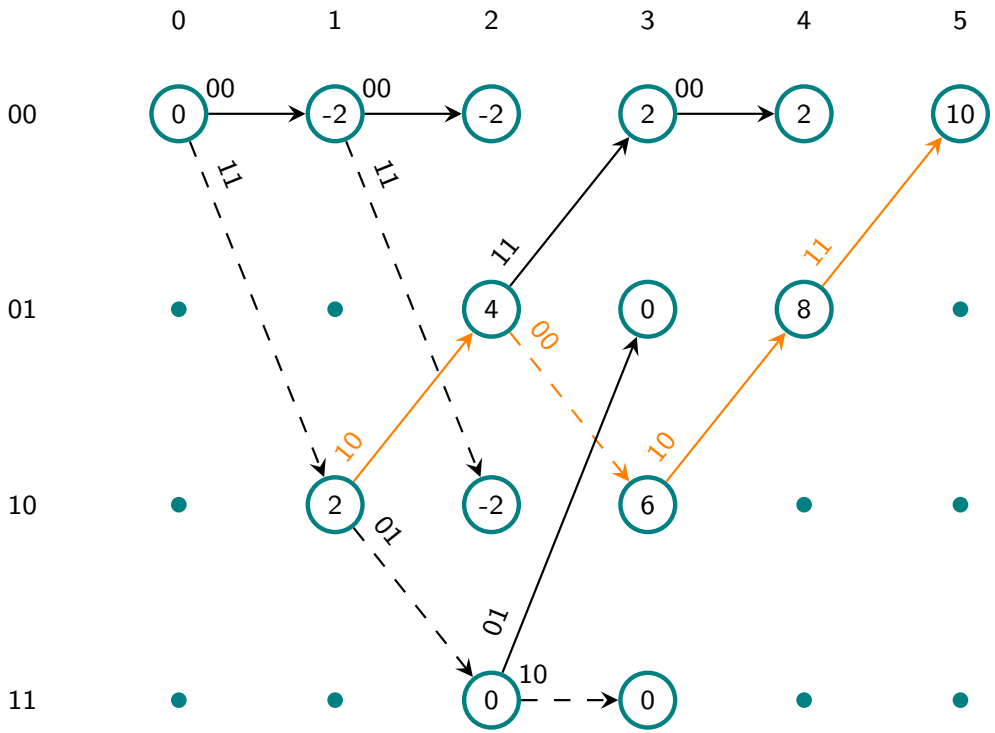

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