

## Arithmetic Coding (sequence example)

- ▶ Simplest case.
- ▶  $\Sigma = \{0, 1\}$
- ▶  $\forall t,$   
 $p(c_t = 0) = 1/3$   
 $p(c_t = 1) = 2/3$
- ▶ Message = 1111
- ▶ Code = 111
- ▶ **Technical:**  
Assume decoder  
knows that length  
of message is 4.