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Formal methods

~~Ques~~ Assignment #3

REPORT :: = Already Existed | No space

| MAX : Z

Book Database
Collection : \mathbb{P} BOOK
collection $< \text{max}$

Init Book Database
Book Database
collection = \emptyset

Buy Book
 Δ Book Database
Newbook ? : BOOK
 $\{ \text{Newbook ?} \} \notin \text{collection}$
collection' = collection $\cup \{ \text{newbook ?} \}$

Already Owned
☐ Book Database
Report ! : REPORT
book ? : BOOK
book ? \in collection
Report ! : Already Existed

no space

Book Database

report 1, 2 REPORT

collection \geq MAX

report 1 = no space