Un Normalized Table:

Id	Stream Name	Book Title Name	Book Author Name	Available Books	Available Status
1	cse	DS & A	A1	10	True
2	cse	DS & A	A1	10	True
3	cse	DS & A	A1	10	True
4	cse	DS & A	A1	10	True
5	cse	DS & A	A1	10	True
6	cse	DS & A	A1	10	True
7	cse	OS	A2	10	True
8	cse	CN	A3	10	True
9	cse	CNS	A4	10	True
10	cse	DBMS	A5	10	True

Functional Dependencies:

1. [Stream Id] ==> [Stream Name]
2. [Book Id] ==> [Book Title Name, Book Author Name]
3. [Stream Id, Book Id] ==> [Availability Status, Availability Quantity]
4. [Stream Name, Book Title Name] ====> [SN, BTN, BAN, AQ, AS]

Anomalies with the above Table:

1. **Update Anomalie**: if I want to update the Stream Name(sname) CSE with cs. I need to update every entry 1,2,3,4,5,6,7,8,9,10 to cs.

   Note: what if there are billion or trillion rows?

2. **Deletion Anomalie**: if I want to delete the book OS. All the information that is linked with the OS will be deleted.
   Note: Information Loss?

3. **Insertion Anomalie**: Let's say, I want to insert the new stream Biology, but I didn't receive any books and status of those books. So, if i use this database, I can't insert the data into this field because I don't have the information of the books to insert with their status and the system will not accept the null values.

Tables After Normalization:

Table 1: Stream

Stream Id	Stream Name
sid1	cse
sid2	eee
sid3	ece

Table 2: Book

Book Id	Book Title Name	Book Author Name
bid1	DS & A	A1
bid2	OS	A2
bid3	DBMS	A3
bid4	Cryptography	A4
bid5	Computer Networks	A5

Table 3: Availability

Book Id	Availability Id	Available Quantity	Available status
bid1	aid1	10	true
bid2	aid2	0	false
bid3	aid3	5	true

Join:

Id	Stream Name	Book Title Name	Book Author Name	Available Books	Available Status
1	sid1	bid1	bid1	aid1	True
2	sid1	bid1	bid1	aid1	True
3	sid1	bid1	bid1	aid1	True
4	sid1	bid1	bid1	aid1	True
5	sid1	bid1	bid1	aid1	True
6	sid1	bid1	bid1	aid1	True
7	sid1	bid2	bid2	aid1	True
8	sid1	bid3	bid3	aid1	True
9	sid1	bid5	bid5	aid1	True
10	sid1	bid4	bid4	aid1	True