

Demonstrate working of trigger:

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### Trigger 1

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Trigger1: validate\_title\_before\_insert\_certifications

Purpose: incorporate validation checking for Enum values

Test result in terminal:

```
[sqlite> INSERT INTO Certifications  
[ ...> VALUES (3, 'ABC');  
Error: Invalid title name for certifications  
sqlite> █
```

With trigger, when user tries to insert any values that not belong to certain types, there will be an error message to prevent inserting.

```
[sqlite> INSERT INTO Certifications  
[ ...> VALUES (3, 'CAP');  
[sqlite> SELECT * FROM Certifications  
[ ...> ;  
3|CAP  
sqlite> █
```

As we can see here, only valid title can be inserted into Certifications table

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### Trigger 2

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Trigger2: validate\_insertion\_before\_insert\_AuthorTopic

Purpose: let user be able to insert a new record into a VIEW

Test result in terminal:

```
[sqlite> INSERT INTO AuthorTopic  
[ ...> VALUES ("John", "How to use SQL");  
Error: cannot modify AuthorTopic because it is a view  
sqlite> █
```

Without trigger, we can't insert values into a VIEW.

```

sqlite> CREATE TRIGGER validate_insertion_before_insert_AuthorTopic
...>     INSTEAD OF INSERT ON AuthorTopic
...> BEGIN
...>     INSERT INTO Author(Name)
...>     VALUES(NEW.AuthorName);
...>
...>     INSERT INTO Topic(name, aid)
...>     VALUES(NEW.TopicName, last_insert_rowid());
[ ...> END;
[sqlite> INSERT INTO AuthorTopic
[ ...> VALUES ("John", "How to use SQL");
[sqlite> SELECT * FROM AuthorTopic;
Bob|Chemistry
John|How to use SQL

```

With trigger, we can successfully insert a value into a VIEW!