

Table Definition

```
CREATE TABLE Students (  
    StudentID INT PRIMARY KEY,  
    Name VARCHAR(100),  
    GPA DECIMAL(3, 2),  
    LastModified DATETIME  
);
```

AFTER INSERT Trigger (Logging)

```
CREATE TABLE StudentLog (  
    LogID INT IDENTITY(1,1) PRIMARY KEY,  
    StudentID INT,  
    ActionTaken VARCHAR(100),  
    LogDate DATETIME  
);
```

```
CREATE TRIGGER trg_AfterInsert_Log  
ON Students  
AFTER INSERT  
AS  
BEGIN  
    INSERT INTO StudentLog (StudentID, ActionTaken, LogDate)  
    SELECT StudentID, 'Inserted', GETDATE()  
    FROM inserted;  
END;
```

AFTER UPDATE Trigger (GPA Change Tracking)

```
CREATE TABLE GPACHangeLog (  
    LogID INT IDENTITY(1,1),  
    StudentID INT,  
    OldGPA DECIMAL(3, 2),  
    NewGPA DECIMAL(3, 2),  
    ChangeDate DATETIME  
);  
  
CREATE TRIGGER trg_AfterUpdate_GPA  
ON Students  
AFTER UPDATE  
AS  
BEGIN  
    INSERT INTO GPACHangeLog (StudentID, OldGPA, NewGPA, ChangeDate)  
    SELECT d.StudentID, d.GPA, i.GPA, GETDATE()  
    FROM deleted d  
    JOIN inserted i ON d.StudentID = i.StudentID  
    WHERE d.GPA <> i.GPA;  
END;
```

FOR DELETE Trigger (Audit Deletion)

```
CREATE TABLE DeletedStudents (  
    StudentID INT,  
    Name VARCHAR(100),  
    DeletedDate DATETIME  
);  
  
CREATE TRIGGER trg_ForDelete_Archive  
ON Students  
FOR DELETE  
AS  
BEGIN  
    INSERT INTO DeletedStudents (StudentID, Name, DeletedDate)  
    SELECT StudentID, Name, GETDATE()  
    FROM deleted;  
END;
```

AFTER UPDATE Trigger (Update Timestamp)

```
CREATE TRIGGER trg_AfterUpdate_Timestamp  
ON Students  
AFTER UPDATE
```