View A

public static void main(String[] args){

SQLExpr expr = parseSQL(query)

public SQLExpr parseSQL(String query){

assertEquals(result, expected);

if (keyword.equals("select"))

expr = expr.append(keyword);

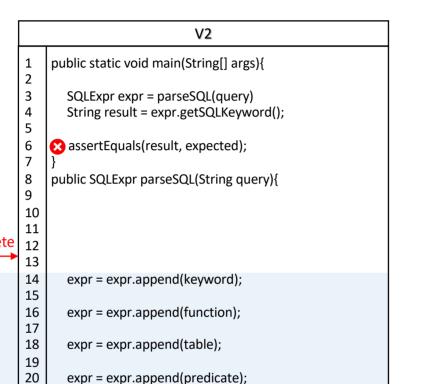
expr = expr.append(function);

expr = expr.append(predicate);

expr = expr.append(table);

keyword = keyword.toUpper();

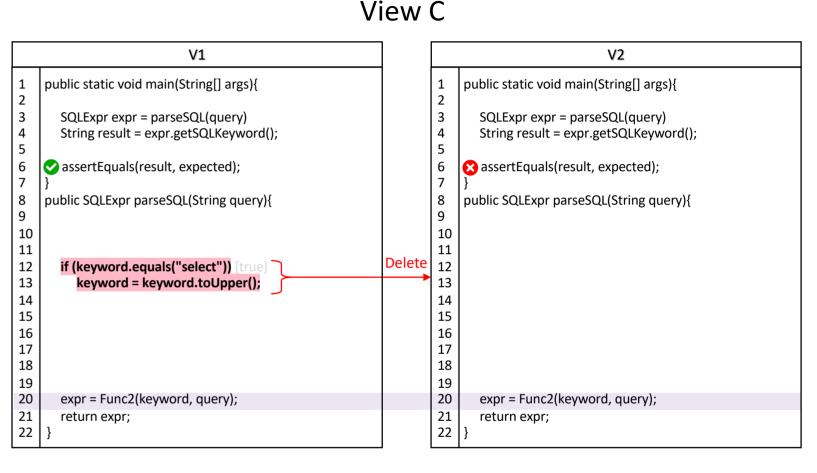
String result = expr.getSQLKeyword();



return expr;

```
V2
 oublic static void main(String[] args){
                                                                    public static void main(String[] args){
  String guery = "select sum(c1) from sales where c2>1":
                                                                       String query = "select sum(c1) from sales where c2>1"
                                                                       SQLExpr expr = parseSQL(query)
  SQLExpr expr = parseSQL(querv):
  String result = expr.getSQLKeyword();
                                                                       String result = expr.getSQLKevword():
  String expected = "SELECT";
                                                                       String expected = "SELECT";
assertEquals(result, expected);
                                                                    assertEquals(result, expected);
public SQLExpr parseSQL(String query){
                                                                  public SQLExpr parseSQL(String query){
  String keyword = Func1(query);
                                                                       String keyword = Func1(query);
  if (keyword.equals("select"))
    keyword = keyword.toUpper();
  expr = Func2(keyword, query);
                                                                       expr = Func2(keyword, query);
  return expr;
                                                                       return expr;
```

View B



Notations: Lines that correspond to each other in V1 and V2 are given the same line numbers. Numbered empty lines indicate statements that are either excluded in a particular view or are absent in a code version. Specifically, if a line is annotated by "delete", the statement is deleted in a version. Otherwise, it is excluded from the view. Changes between versions ("Add", "Update", "Delete") are shown on arrows between code snippets. For simplicity, each "if" statement (e.g., in line 12) is annotated with a label showing whether the "if" condition is evaluated to true or false. Colored backgrounds highlight the differences between the views.