
Measuring Code Structure

for

Software Metrics Lab

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1. Introduction

To be sure that we are measuring the desired attribute, we generally represent the relevant aspects of a module or design using a model containing only the information relevant to the attribute. We can think of structure from at least two perspectives:

1. Control flow structure
2. Data flow structure

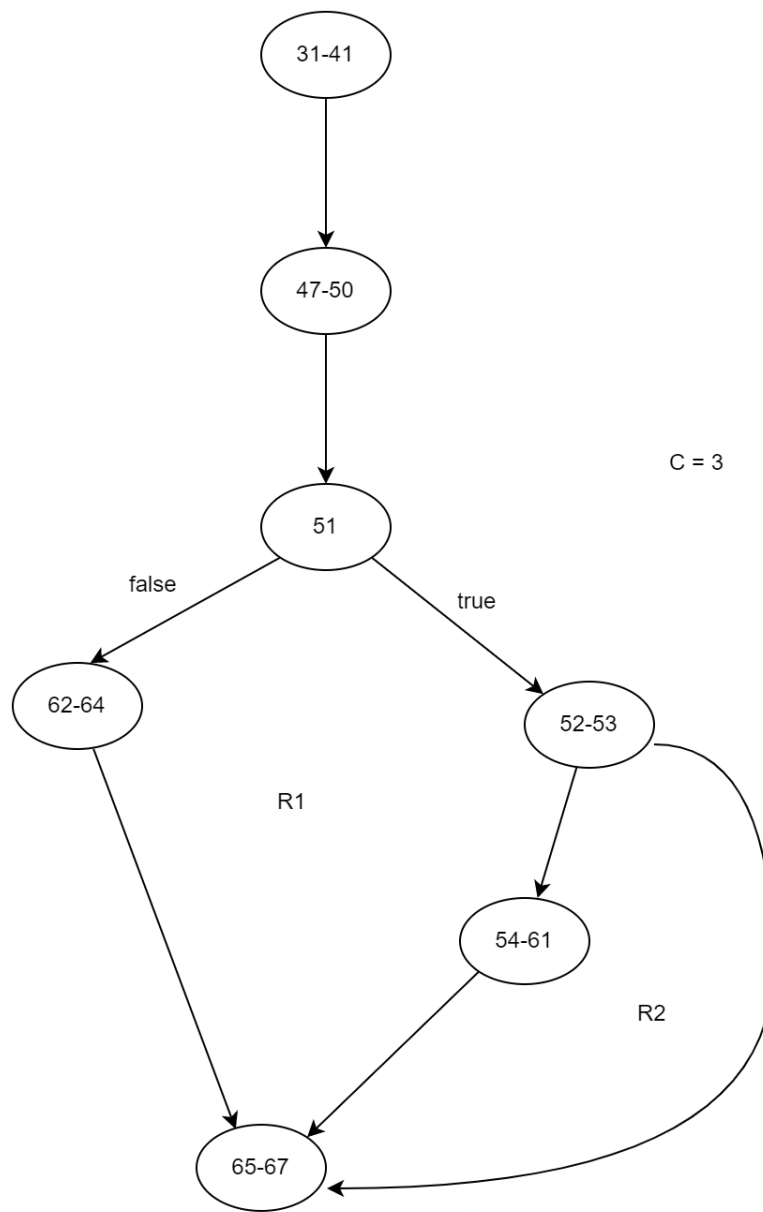
The **control flow** addresses the sequence in which instructions are executed in a program. This aspect of structure reflects the iterative and looping nature of programs.

Data flow follows the trail of a data item as it is created or handled by a program. Many times, the transactions applied to data are more complex than the instructions that implement them.

We will measure our code structure by using control flow diagram. Besides, we will calculate the cyclomatic complexity of every flow graph.

2. Control Flow Graphs of Every Classes

2.1 StudentInfoActivity.java

**Figure: StudentsInfoActivity.java**

2.2 SyllabusActivity.java

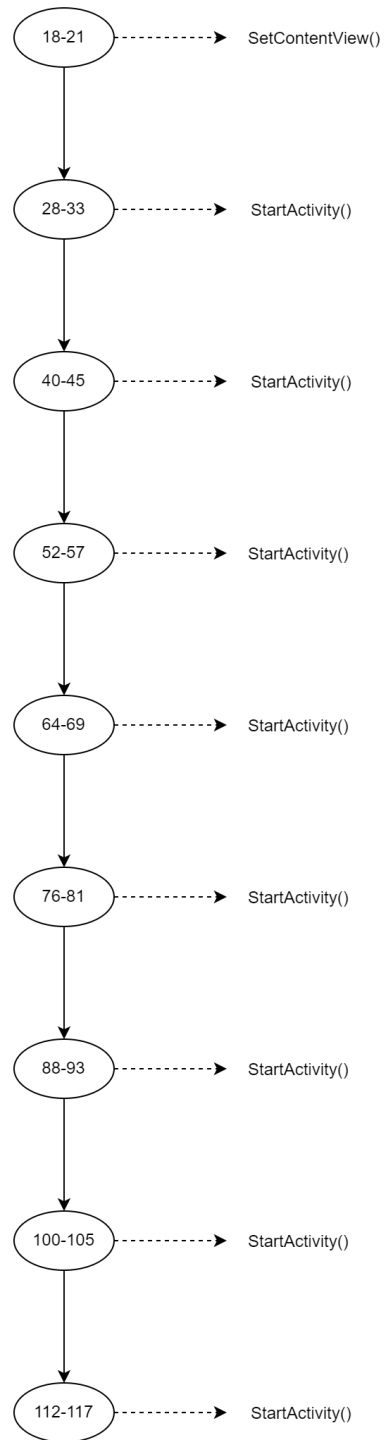


Figure: SyllabusActivity.java

2.3 OfficialsActivity.java

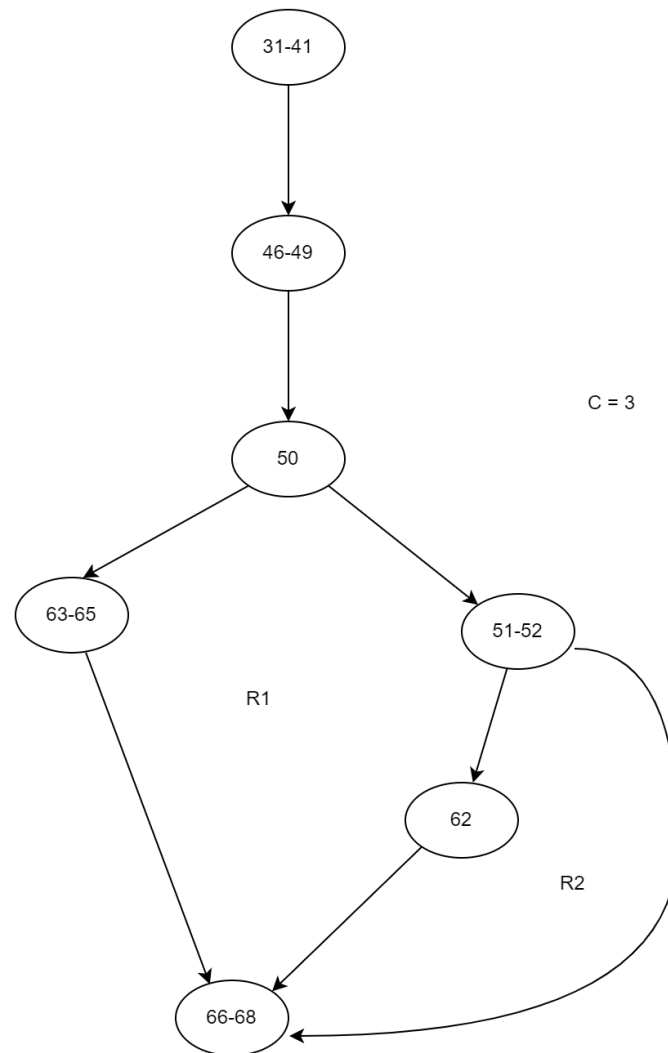


Figure: OfficialsActivity.java

2.4 ProfileActivity.java

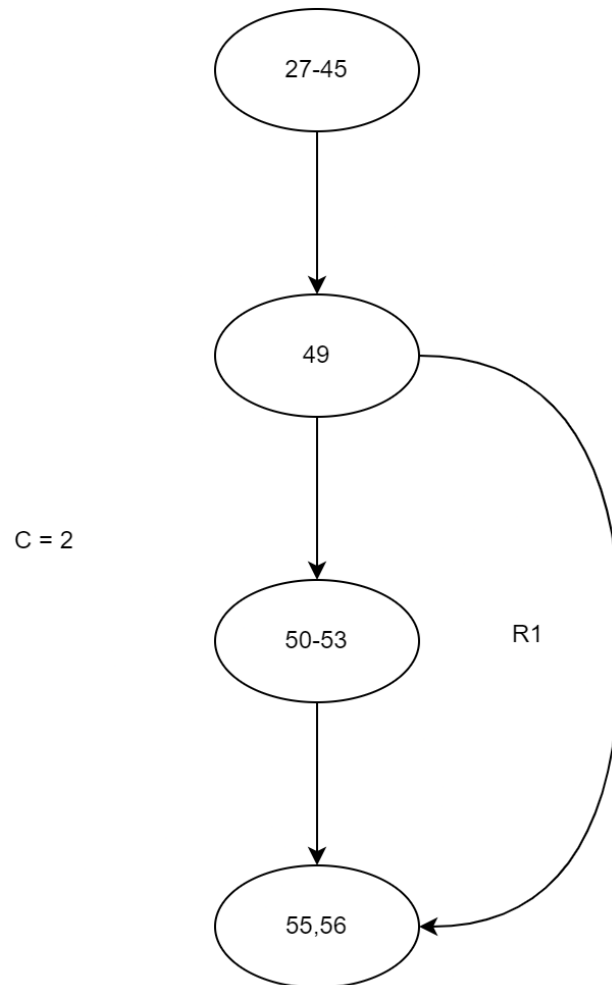


Figure: ProfileActivity.java

2.5 StudentAdapterActivity.java

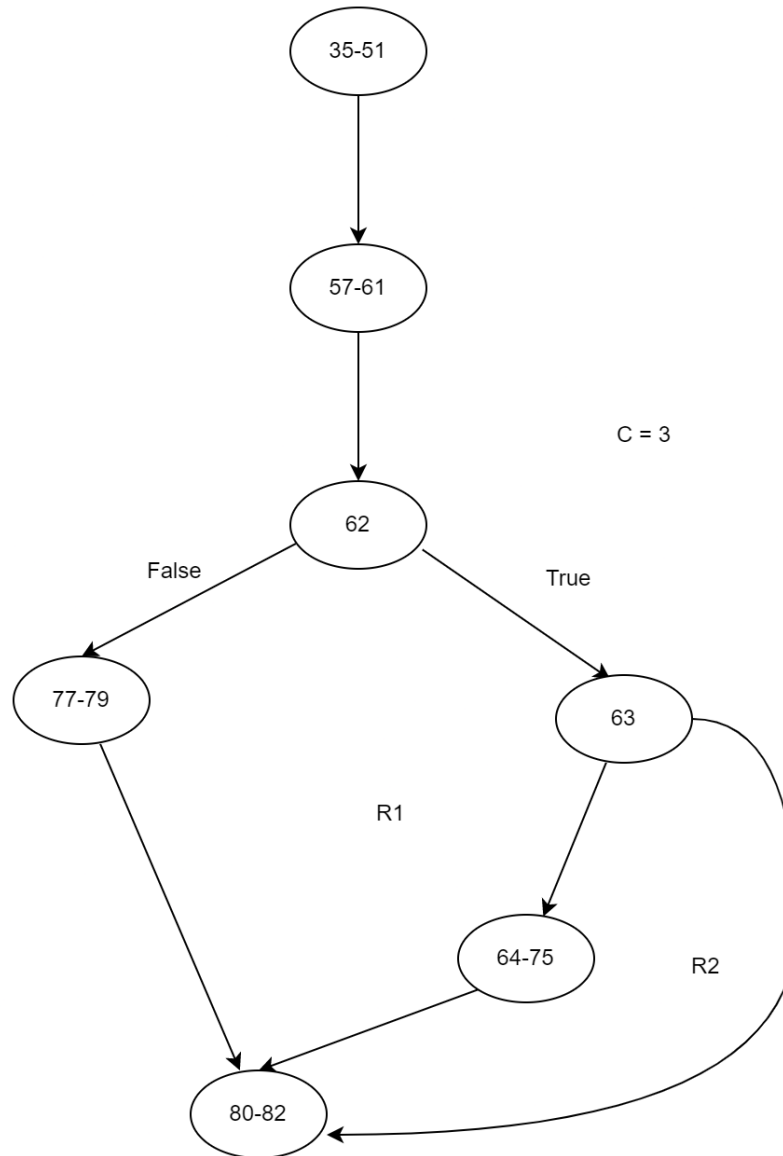


Figure: StudentAdapterActivity.java

2.6 TeachersInfoActivity.java

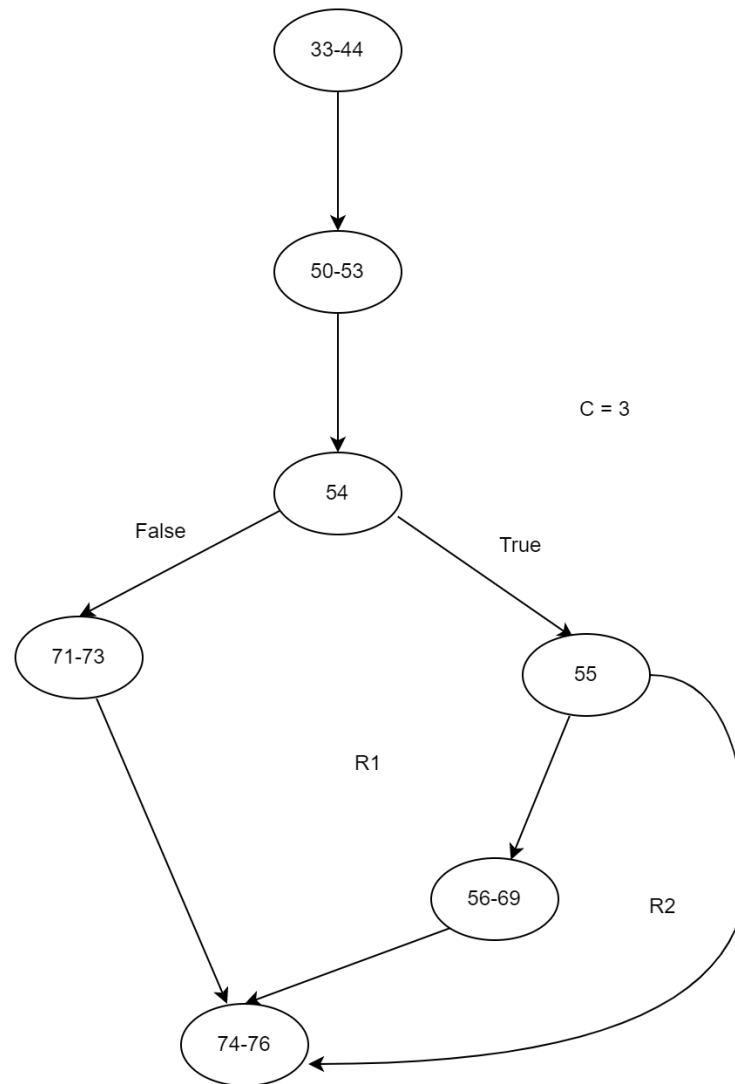


Figure: TeachersInfoActivity.java

2.7 NoticeBoardActivity.java

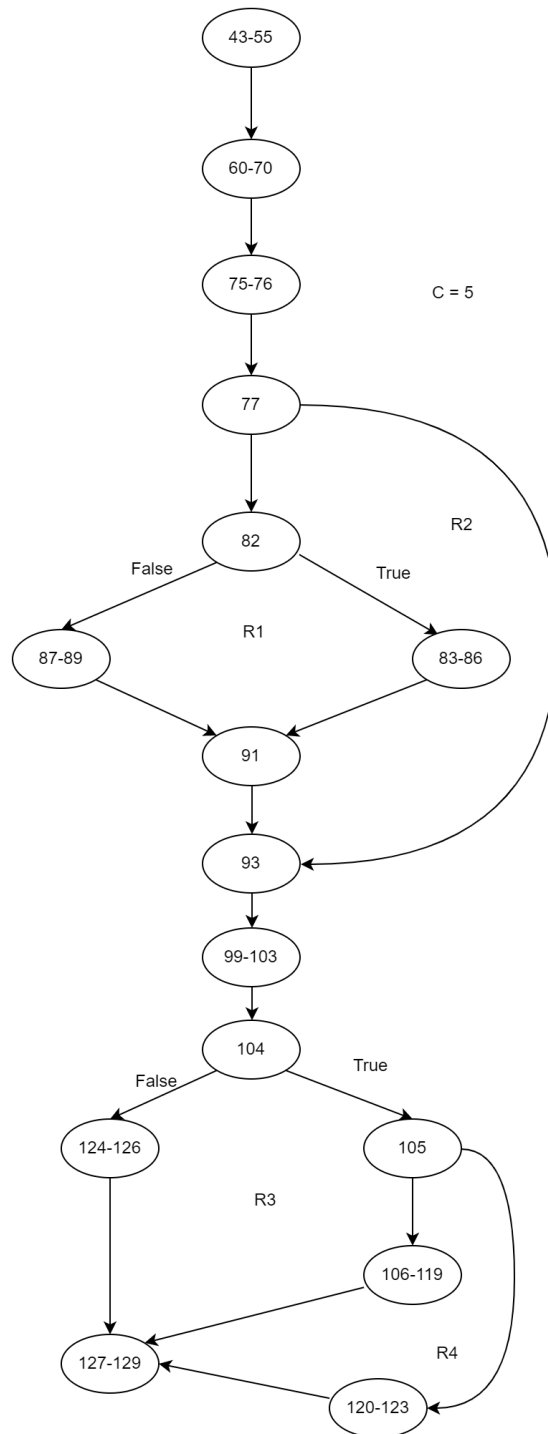


Figure: NoticeBoardActivity.java

2.8 AuthenticationActivity.java

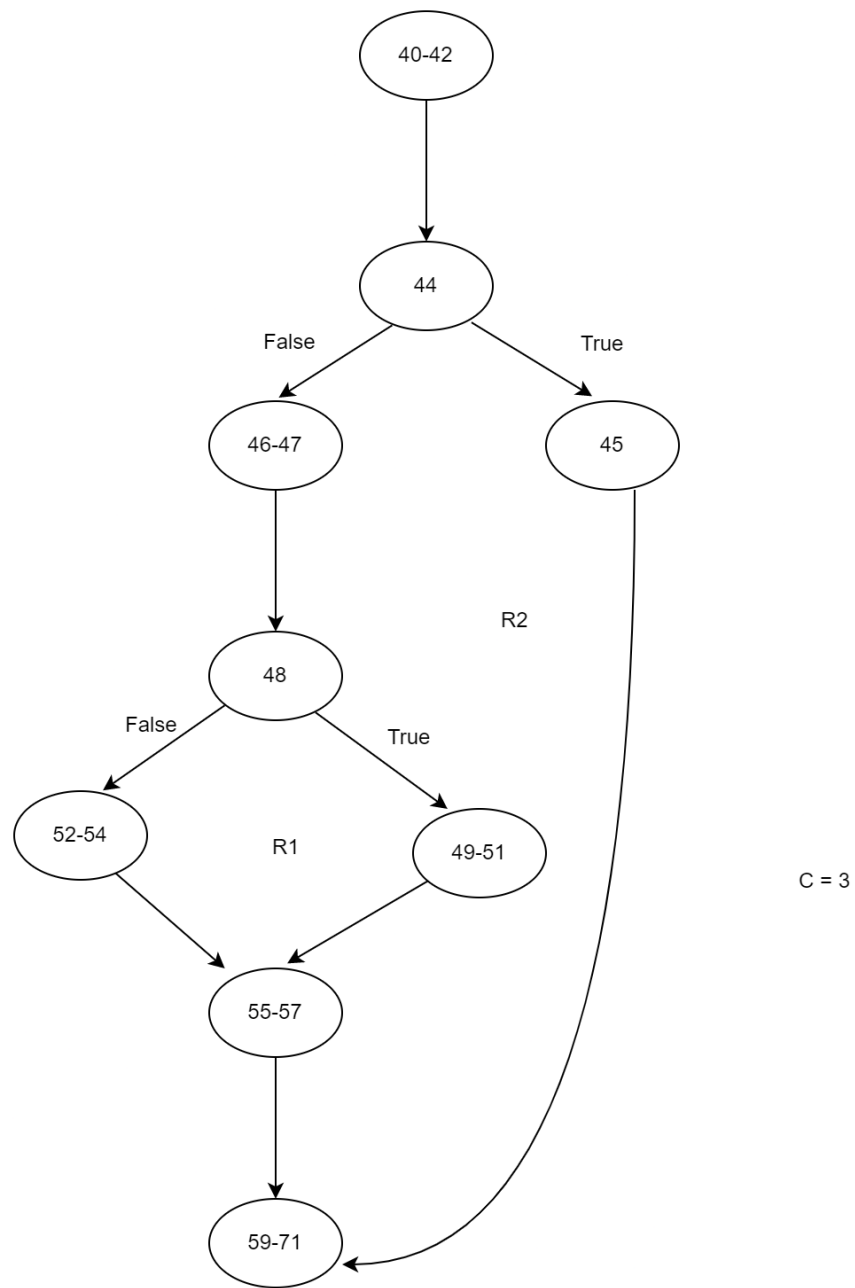


Figure: AuthenticationActivity.java

2.9 CourseCoordinatorActivity.java

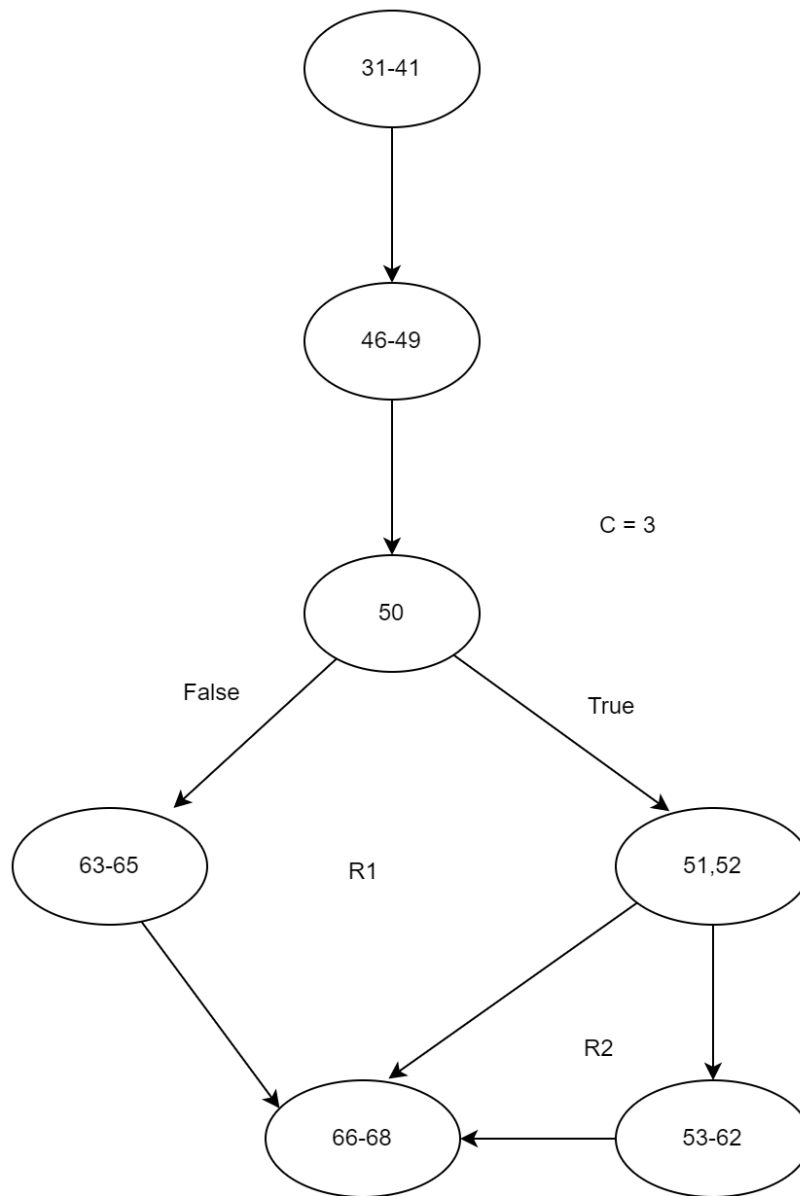


Figure: CourseCoordinatorActivity.java

2.10 MainActivity.java

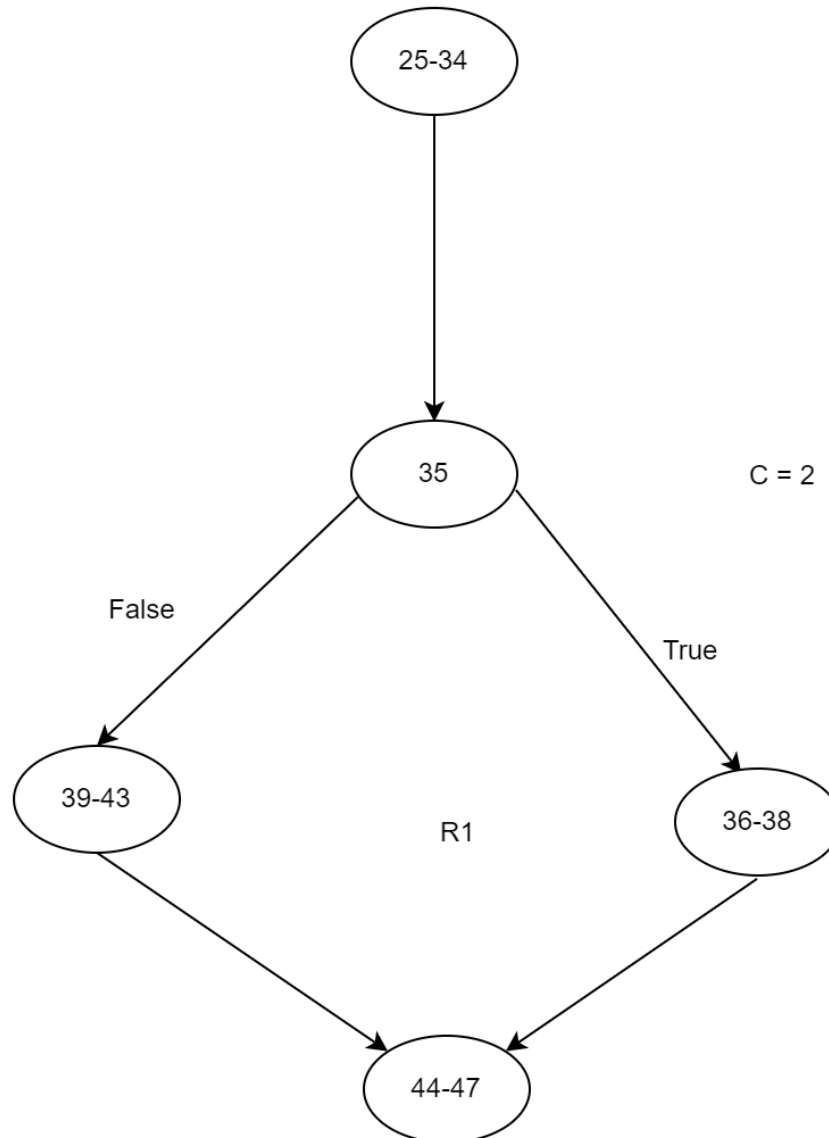


Figure: MainActivity.java