Compile the program using gcc

$ gcc -fprofile-arcs -ftest-coverage -o Example Example.c

This will create .gcno file in addition to the executable.

$ ls

Example Example.c Example.gcno

Run the executable

$ ./Example

Condition is true...!

End of program

This will create .gcda file

$ ls

Example Example.c Example.gcda Example.gcno

Now gcov can be run to get the coverage data.

$ gcov -b -c Example.c

File 'Example.c'

Lines executed:75.00% of 8

Branches executed:100.00% of 2

Taken at least once:50.00% of 2

Calls executed:66.67% of 3

Example.c:creating 'Example.c.gcov'

Above command creates .gcov file with contents as shown below

$ cat Example.c.gcov

-: 0:Source:Example.c

-: 0:Graph:Example.gcno

-: 0:Data:Example.gcda

-: 0:Runs:1

-: 0:Programs:1

-: 1:#include

-: 2:

-: 3:int main()

function main called 1 returned 100% blocks executed 71%

1: 4:{

1: 5: int cond = 1;

-: 6:

1: 7: if ( cond ) {

branch 0 taken 1 (fallthrough)

branch 1 taken 0

1: 8: printf("Condition is true...!\n");

call 0 returned 1

-: 9: } else {

#####: 10: printf("Condition is false...!\n");

call 0 never executed

#####: 11: return(1);

-: 12: }

-: 13:

1: 14: printf("End of program\n");

call 0 returned 1

-: 15:

1: 16: return(0);

-: 17:}