

Task 6

Code snippet:

```
1      int x = ...;
2      boolean y = ...;
3      ...
4      if ((x < 0 && x > -13) || ((x < 10) && !y) || (y && x == 42)) { ... }
```

1- Provide test cases for minimal single condition coverage:

- a. X = -5, Y = True
- b. X = 11, Y = False
- c. X = -13, Y = False
- d. X = 9, Y = True
- e. X = 42, Y = True

2- Which coverage criterion is stronger, Single Condition Coverage or Branch Coverage?

Branch coverage is stronger as single condition coverage doesn't guarantee that all branches are executed

It tests singular statements with values that evaluate to true and false, but doesn't guarantee that the whole branch condition evaluates to true.

Statements **a.**, **c.**, **e.** evaluate the branch to True, in this case the two chances (True or False) for this branch are taken, but the way the values are selected do not guarantee the branch will be evaluated at least once to true and once to false.