**A-3: Loops**

**Question 1:**

Identify the basic blocks that correspond to the while loop. How is the GIMPLE for a while loop different from simple if-else jumps?

**Answer:**

Basic blocks correspond to the while loop are bb2, bb3 and bb4. In while loop, control jump to a backward basic block.

**Question 2:**

Indentify the basic blocks for the nested for-loop. You should be able to identify initializers , conditions and increments for each loop as well as the shared inner body. Is there really anything special about a for-loop as compared to a while-loop?

**Answer:**

Basic blocks for nested for-loop are bb6, bb7 and bb8. Initializers are separated out in initial basic blocks. This is the special thing about for-loop as compared to a while-loop.