# Gimple

f ()

{

int a;

int b;

int c;

a = Z;

if (a <= 9) goto <D.1801>; else goto <D.1802>;

<D.1801>:

b = 5;

c = 17;

goto <D.1803>;

<D.1802>:

b = 6;

c = 20;

if (a == 0) goto <D.1804>; else goto <D.1805>;

<D.1804>:

c = 0;

<D.1805>:

<D.1803>:

\_1 = b \* 10;

\_2 = c + \_1;

Z = \_2;

}

# Input Code

int Z;

void f()

{

int a, b, c;

a = Z;

if (a < 10) {

b = 5;

c = 17;

} else {

b = 6;

c = 20;

if (a == 0) {

c = 0;

}

}

Z = b \* 10 + c;

}

# Answer1]

In GIMPLE the if block has been broken down into various sections by giving control to the specified section by using goto. Control is transferred with unconditional goto like goto <D.1803> and with conditional goto like if (a == 0) goto <D.1804>; else goto <D.1805>;

# Answer2]

Yes it becomes easier to read and understand gimple file as here there are clear and distinct sections included and sequence is also easily readable.

f ()

{

int c;

int b;

int a;

int Z.0;

int D.1715;

<bb 2>:

a = Z;

if (a <= 9)

goto <bb 3>;

else

goto <bb 4>;

<bb 3>:

b = 5;

c = 17;

goto <bb 6>;

<bb 4>:

b = 6;

c = 20;

if (a == 0)

goto <bb 5>;

else

goto <bb 6>;

<bb 5>:

c = 0;

<bb 6>:

D.1715 = b \* 10;

Z.0 = D.1715 + c;

Z = Z.0;

return;

}