**Program 2 – Unconditional Jump Program files**

C Program:

int a = 11;

int b = 6;

if(a > b){

int c = a + b; // 17

}

else{

int c = a – b; // 5

}

Assembly code:

irmov b 0

rmmov 0 0

irmov 6 1

rmmov 1 1

sub 0 1

jg 3c

mrmov 1 2

add 0 2

rmmov 2 2

jump 4e

mrmov 1 2

sub 0 2

rmmov 0 2

halt

Hex code:

00 f0 0b 00 00 00 30 00 00 00 00 00 00 f1 06 00 00 00 30 10 01 00 00 00 42 01 00 00 00 00

66 ff 3c 00 00 00 20 20 01 00 00 00 40 02 00 00 00 00 30 20 02 00 00 00 50 ff 4e 00 00 00 20 20 01 00 00 00 42 02 00 00 00 00 30 20 02 00 00 00 70 00 00 00 00 00