

Assignment 2  
Lab 6 - ICG

1) input1.c

```
≡ icg_quad.txt × C input1.c
ICG > ≡ icg_quad.txt
1  t1 a > b
2  if t1 goto L1
3  goto L2
4  Label L1 :
5  t2 = a + 1
6  a = t2
7  t3 = b - 1
8  b = t3
9  Label L2 :
10
```

2) Input2.c

```
≡ icg_quad.txt ×
ICG > ≡ icg_quad.txt
1  t1 a > b
2  if t1 goto L1
3  goto L2
4  Label L1 :
5  t2 = a + 1
6  a = t2
7  t3 = b - 1
8  b = t3
9  Label L2 :
10 t4 = a - 1
11 a = t4
12 t5 = b - 1
13 b = t5
14 Label L3 :
15
```

3) input3.c

```

t1 a > b
if t1 goto L1
goto L2
Label L1 :
t2 = a + 1
a = t2
t3 = b - 1
b = t3
Label L2 :
t4 = a - 1
a = t4
t5 = b - 1
b = t5
t6 b < 0
if t6 goto L3
goto L4
Label L3 :
t7 = b + 1
b = t7
Label L4 :
b = 0
Label L5 :
Label L6 :

```

#### 4) input4.c

```

≡ icg_quad.txt × C input
ICG > ≡ icg_quad.txt
1   Label L1 :
2   t1 = a + 1
3   a = t1
4   t2 a > b
5   if t2 goto L1
6

```

## 5) input5.c

```
≡ icg_quad.txt × C input5.c
ICG > ≡ icg_quad.txt
1   Label L1 :
2   t1 = a + 1
3   a = t1
4   t2 c > d
5   if t2 goto L2
6   goto L3
7   Label L2 :
8   t3 = c + 1
9   c = t3
10  Label L3 :
11  t4 a > b
12  if t4 goto L1
13
```