

Question 5

Convert the BNF rules into YACC form and write code to generate abstract syntax tree

Input:

```
1  main()
2  {
3      int a, b, c;
4      if (a < b)
5      {
6          a = a + b;
7      }
8      while (a < b)
9      {
10         a = a + b;
11     }
12     if (a <= b)
13     {
14         c = a - b;
15     }
16     else
17     {
18         c = a + b;
19     }
20 }
```

Output :

C:\Users\malav\OneDrive\Documents\CDLab\Cycle2\Pg6>a input.c

```
-----
Pos Operator Arg1 Arg2 Result
-----
0      <      a      b      t0
1      ==     t0     FALSE 5
2      +      a      b      t1
3      =      t1           a
4      GOTO                    5
5      <      a      b      t2
6      ==     t2     FALSE 10
11     ==     t4     FALSE 15
12     -      a      b      t5
13     =      t5           c
14     GOTO                    17
15     +      a      b      t6
16     =      t6           c
-----
```