

Assignment 7 – 08 - May - 2023

Write LEX and YACC program to generate Intermediate code Generation for the following :

Input :

```
a = 1;
b = 1;
while( a <= 5 )
{
    b = 1;
    while( b <= 5 )
    {
        b = b + 1;
        print b;
    }
    a = a + 1;
    print a;
}
```

Output :

```
1. a = 1
2. b = 1
3. if (a<=5) goto(5)
4. goto(15)
5. b=1
6. if (b<=5) goto(8)
7. goto(11)
8. t1 = b + 1
9. b = t1
10. print b
11. t2 = a + 1
12. a = t2
13. print a
14. goto(3)
```

Input :

```
while(a<c or c>d)
{
    a=b/c*d+(-c);
    print a;
}
```

Output :

1. if (a<c) goto(5)
2. goto(3)
3. if (c>d) goto(5)
4. goto(11)
5. t1=u minus c
6. t2=b/c
7. t3=t2*d
8. a=t3+t1
9. print a
10. goto(1)