```java
package asm;

import java.io.BufferedReader;
import java.io.File;
import java.io.FileNotFoundException;
import java.io.FileReader;
import java.io.FileWriter;
import java.io.IOException;
import java.util.HashMap;

public class pass2 {

  public static void main(String[] args) throws IOException {
    String line;
    String[][] mc_code= new String[10][3] ;
    int count=0;
    BufferedReader b1 = new BufferedReader(new FileReader("IC.txt"));
    BufferedReader b2 = new BufferedReader(new FileReader("symtab.txt"));
    BufferedReader b3 = new BufferedReader(new FileReader("littab.txt"));
    HashMap <Integer,String>symaddr=new HashMap <Integer,String>();
    HashMap <Integer,String>litaddr =new HashMap <Integer,String>();



    System.out.println();
    System.out.println("\n\t ======= SYMBOL TABLE ========");
     System.out.println("\t----------------------------------");
     System.out.println("\tSymbol|"+"\t"+"Address");
     System.out.println("\t----------------------------------");
    while((line = b2.readLine()) != null)
      {
      String split_words[] = line.split("\t");
      count++;
      System.out.println("\t" + line);
      symaddr.put(count, split_words[1]);
      }
    System.out.println("\n");

    System.out.println("\n\t ======= Literal TABLE =======");
      System.out.println("\t--------------------------------");
      System.out.println("\tLiteral|"+"Address");
      System.out.println("\t--------------------------------");
    count=0;
    while((line = b3.readLine()) != null)
      {
      String split_words[] = line.split("\t");
      System.out.println("\t "+line);
      count++;
      litaddr.put(count, split_words[1]);
      }

    System.out.println("\n");

    System.out.println("\n\t ======= OPCODE TABLE ======= \n");
```

```java
        System.out.println("\t----------------------------------------");
        System.out.println("\tMnemonic|"+"Info");
        System.out.println("\t----------------------------------------");
        count=0;
while((line = b1.readLine()) != null)
{
 String split_words[] = line.split("\t");
 System.out.println("\t" + line);
 if(split_words[1].contains("IS"))
 {
  mc_code[count][0]=split_words[1].substring(4,5);
  mc_code[count][1]=split_words[2];
  if(split_words[3].contains("C"))
  {
   int lit_index=Integer.parseInt(split_words[3].substring(3,4));
   mc_code[count][2]=litaddr.get(lit_index);
  }
  else if(split_words[3].contains("S"))
  {
   int sym_index=Integer.parseInt(split_words[3].substring(3,4));
   mc_code[count][2]=symaddr.get(sym_index);
  }
  count++;
 }
 else if(split_words[1].contains("DL,1"))
 {
  mc_code[count][0]=  "00" ;
  mc_code[count][1]= "0" ;
  mc_code[count][2]= "00"+ split_words[2].substring(3,4);
  count++;
 }

}
System.out.println("\n");
System.out.println("\n\t============== MACHINE CODE TABLE ==============");
   System.out.println("\t--------------------------------------------------");
System.out.println("\tIS op-code\t"+"|Register\t"+"|Symbol address");
System.out.println("\t--------------------------------------------------");
for(int i=0;i<count;i++)
{
 System.out.println("\t"+mc_code[i][0]+"\t\t"+mc_code[i][1]+"\t\t"+mc_code[i][2]);
}

File mcode = new File("MC.txt");
FileWriter wr = new FileWriter("MC.txt");


 for(int i=0;i<count;i++)
 {
 wr.write(mc_code[i][0]+"\t"+mc_code[i][1]+"\t"+mc_code[i][2]+"\n");
 }
 wr.close();
```

}

}

======= SYMBOL TABLE ========

Symbol| Address

A 200
B 202

======= Literal TABLE =======

Literal|Address

 =10 203

====== OPCODE TABLE =======

Mnemonic|Info

START (AD,1)
DS (DL,2) (C,2)
ADD (IS,1) (31) (C,1)
LTORG (AD,4)
MUL (IS,3) (32) (S,1)
END (AD,2)

============== MACHINE CODE TABLE ==============

IS op-code |Register |Symbol address
----
1 (31) 203
3 (32) 200