[Java Program to Implement PASS-1 of 2-PASS ASSEMBLER](http://spccexperiments.blogspot.com/2015/06/java-program-to-implement-pass-1-of-2.html)

**Program:**

// save as *exp2.java*

*import java.io.\*;*

*class exp2*

*{*

*public static void main(String ar[])throws IOException*

*{*

*BufferedReader br=new BufferedReader(new InputStreamReader(System.in));*

*int i;*

*String a[][]={*

*{"","START","101",""},*

*{"","MOVER","BREG","ONE"},*

*{"","MOVEM","BREG","TERM"},*

*{"AGAIN","MULT","BREG","TERM"},*

*{"","MOVER","CREG","TERM"},*

*{"","ADD","CREG","N"},*

*{"","MOVEM","CREG","RESULT"},*

*{"N","DS","2",""},*

*{"RESULT","DS","2",""},*

*{"ONE","DC","1",""},*

*{"TERM","DS","1",""},*

*{"END","","",""}*

*};*

*int lc=Integer.parseInt(a[0][2]);*

*String st[][]=new String[5][2];*

*int cnt=0,l;*

*for(i=1;i<11;i++)*

*{*

*if(a[i][0]!="")*

*{*

*st[cnt][0]=a[i][0];*

*st[cnt][1]=Integer.toString(lc);*

*cnt++;*

*if(a[i][1]=="DS")*

*{*

*l=Integer.parseInt(a[i][2]);*

*lc=lc+l;*

*}*

*else*

*{*

*lc++;*

*}*

*}*

*else*

*{*

*lc++;*

*}*

*}*

*System.out.println("SYMBOL\t\tVALUE\n");*

*for(i=0;i<5;i++)*

*{*

*System.out.println(st[i][0]+"\t\t"+st[i][1]);*

*}*

*}*

*}*

**OUTPUT :**

javac exp2.java

java exp2

SYMBOL VALUE

AGAIN 103

N 107

RESULT 109

ONE 111

TERM 112