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import java.io.BufferedReader;
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{
        BufferedReader b1 = new BufferedReader(new FileReader("intermediate.txt"));
        BufferedReader b2 = new BufferedReader(new FileReader("symtab.txt"));
        BufferedReader b3 = new BufferedReader(new FileReader("littab.txt"));
        FileWriter f1 = new FileWriter("Pass2.txt");
        HashMap<Integer, String> symSymbol = new HashMap<Integer, String>();
        HashMap<Integer, String> litSymbol = new HashMap<Integer, String>();
        HashMap<Integer, String> litAddr = new HashMap<Integer, String>();
        String s;
        int symtabPointer=1,littabPointer=1,offset;
        while((s=b2.readLine())!=null){
            String word[]=s.split("\t\t\t");
            symSymbol.put(symtabPointer++,word[1]);
        }
        while((s=b3.readLine())!=null){
            String word[]=s.split("\t\t");
            litSymbol.put(littabPointer,word[0]);
            litAddr.put(littabPointer++,word[1]);
        }
        while((s=b1.readLine())!=null){
            if(s.substring(1,6).compareToIgnoreCase("IS,00")==0){
                f1.write("+ 00 0 000\n");
            }
            else if(s.substring(1,3).compareToIgnoreCase("IS")==0){
                f1.write("+ "+s.substring(4,6)+" ");
                if(s.charAt(9)==' '){
                    f1.write(s.charAt(8)+" ");
                    offset=3;
                }
                else{
                    f1.write("0 ");
                    offset=0;
                }
                if(s.charAt(8+offset)=='S')

                f1.write(symSymbol.get(Integer.parseInt(s.substring(10+offset,s.length()-1)))+"\n");
                else
                f1.write(litAddr.get(Integer.parseInt(s.substring(10+offset,s.length()-1)))+"\n");
            }
        }
    }
}

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        else if(s.substring(1,6).compareToIgnoreCase("DL,01")==0){
            String s1=s.substring(10,s.length()-1),s2="";
            for(int i=0;i<3-s1.length();i++)
                s2+="0";
            s2+=s1;
            f1.write("+ 00 0 "+s2+"\n");
        }
        else{
            f1.write("\n");
        }
    }
    f1.close();
    b1.close();
    b2.close();
    b3.close();
    System.out.print("Ended");
}
}

```

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pass2.java  symtab.txt  littab.txt  intermediate.txt  Pass2.txt
1
2 + 04 1 206
3 + 05 1 211
4 + 04 1 211
5 + 04 3 212
6 + 01 3 207
7 + 07 6 208
8 + 00 0 005
9 + 00 0 001
10 + 02 1 213
11 + 07 1 202
12 + 00 0 000
13
14 + 03 3 212
15
16
17
18
19 + 00 0 001
20

```

/home/ubuntu/Downloads/Expt-2/Pa

pass2.java	symtab.txt	littab.txt	intermediate.txt	Pass2.txt
1 A	211	1		
2 LOOP	202	1		
3 B	212	1		
4 NEXT	208	1		
5 BACK	202	1		
6 LAST	210	1		
7				

pass2.java	symtab.txt	littab.txt	intermediate.txt	Pass2.txt
1 5	206			
2 1	207			
3 1	213			
4				

pass2.java	symtab.txt	littab.txt	intermediate.txt	Pass2.txt
1 (AD,01)(C,200)				
2 (IS,04)(1)(L,1)				
3 (IS,05)(1)(S,1)				
4 (IS,04)(1)(S,1)				
5 (IS,04)(3)(S,3)				
6 (IS,01)(3)(L,2)				
7 (IS,07)(6)(S,4)				
8 (DL,01)(C,5)				
9 (DL,01)(C,1)				
10 (IS,02)(1)(L,3)				
11 (IS,07)(1)(S,5)				
12 (IS,00)				
13 (AD,03)(S,2)+2				
14 (IS,03)(3)(S,3)				
15 (AD,03)(S,6)+1				
16 (DL,02)(C,1)				
17 (DL,02)(C,1)				
18 (AD,02)				
19 (DL,01)(C,1)				
20				

Expt-2/intermediate.txt