Code:

```
import java.io.*;
class IntermediateCodeGenerator {
   private static final char[][] precedence = {
       { '/', '1' }, { '*', '1' }, { '+', '2' }, { '-', '2' }
   };
   private static int precedenceOf(String t) {
     char token = t.charAt(0);
     for (int i = 0; i < precedence.length; i++) {
       if (token == precedence[i][0]) {
         return Integer.parseInt(precedence[i][1] + "");
       }
     }
     return -1;
   }
   public static void main(String[] args) throws Exception {
     int i, j, opc = 0;
     char token;
     boolean processed[];
     String[][] operators = new String[10][2];
     String expr = "", temp;
     BufferedReader in = new BufferedReader(new InputStreamReader(System.in));
     System.out.print("\nEnter an expression: ");
     expr = in.readLine();
     processed = new boolean[expr.length()];
     for (i = 0; i < processed.length; i++) {
       processed[i] = false;
     }
     for (i = 0; i < expr.length(); i++) {
       token = expr.charAt(i);
       for (j = 0; j < precedence.length; j++) {
         if (token == precedence[j][0]) {
           operators[opc][0] = token + "";
           operators[opc][1] = i + "";
           opc++;
           break;
         }
       }
     }
     System.out.println("\nOperators:\nOperator\tLocation");
     for (i = 0; i < opc; i++) {
       System.out.println(operators[i][0] + "\t\t" + operators[i][1]);
     }
     // sort
     for (i = opc - 1; i >= 0; i--) {
       for (j = 0; j < i; j++) {
```

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        if (precedenceOf(operators[j][0]) > precedenceOf(operators[j + 1][0])) {
          temp = operators[j][0];
          operators[j][0] = operators[j + 1][0];
          operators[j + 1][0] = temp;
          temp = operators[j][1];
          operators[j][1] = operators[j + 1][1];
          operators[j + 1][1] = temp;
        }
      }
    }
    System.out.println("\nOperators sorted in their
precedence:\nOperator\tLocation");
    for (i = 0; i < opc; i++) {
      System.out.println(operators[i][0] + "\t\t" + operators[i][1]);
    }
    System.out.println();
    for (i = 0; i < opc; i++) {
      j = Integer.parseInt(operators[i][1] + "");
      String op1 = "", op2 = "";
      if (processed[j - 1] == true) {
        if (precedenceOf(operators[i - 1][0]) == precedenceOf(operators[i][0])) {
          op1 = "t" + i;
        } else {
          for (int x = 0; x < opc; x++) {
            if ((j - 2) == Integer.parseInt(operators[x][1])) {
              op1 = "t" + (x + 1) + "";
            }
          }
        }
      } else {
        op1 = expr.charAt(j - 1) + "";
      }
      if (processed[j + 1] == true) {
        for (int x = 0; x < opc; x++) {
          if ((j + 2) == Integer.parseInt(operators[x][1])) {
            op2 = "t" + (x + 1) + "";
          }
        }
      } else {
        op2 = expr.charAt(j + 1) + "";
      }
      System.out.println("t" + (i + 1) + " = " + op1 + operators[i][0] + op2);
      processed[j] = processed[j - 1] = processed[j + 1] = true;
    }
  }
```

Output:

```
Enter an expression: a*b/c+d-e*fa*b/c+d-e*f

Operators:
Operator        Location
*               1
/               3
+               5
-               7
*               9

Operators sorted in their precedence:
Operator        Location
*               1
/               3
*               9
+               5
-               7

t1 = a*b
t2 = t1/c
t3 = e*f
t4 = t2+d
t5 = t4-t3
```