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| **Ex. No. 09** | **Intermediate Code Generation** | | |
| Date of Exercise | \_\_\_\_\_\_\_\_\_\_\_\_ | Date of Output Verification | \_\_\_\_\_\_\_\_\_\_\_\_ |

**Question**

Write a program to convert the given arithmetic expression to three address code.

**Program**

import java.util.Scanner;

//@author William Scott

public class CompilerLabExp9IntermediateCodeGeneration {

//UR12CS135 - P.William Scott - Exp 7 - Loader

public static String input, minput, st1, st2;

public static char i = 'A';

public static Scanner in = new Scanner(System.in);

public static char[] sym = {'/', '\*', '+', '-'};

public static void main(String[] args) {

System.out.println("\nUR12CS135 - Intermediate Code Generation");

input = "a+b\*c/c";

minput = input;

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

for (char a : sym) {

fun(a);

}

}

public static void fun(char a) {

do {

for (int j = 0; j < minput.length(); j++) {

if (minput.charAt(j) == a) {

st1 = "" + i;

st2 = minput.substring(j - 1, j + 2);

minput = minput.replace(st2, st1);

i++;

System.out.println(minput + "\t" + st1 + "=" + st2);

}

}

} while (minput.contains(a + ""));

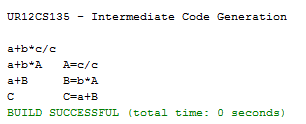
}

}

**Input**

a+b\*c/c

**Output**



**Result**

Implementation of Intermediate Code Generation in java is successfully done.

[Signature of the Staff In-charge]

Name of the Staff In – charge: Mr. Jeban Chandir Moses

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_