13. INTERMEDIATE CODE: TRIPLE

CODE:

#include <stdio.h>

#include <string.h>

int main() {

char line[20];

int s[20], t = 1, m = 0, i = 0, prevMem = 0;

printf("Enter string:");

fgets(line, sizeof(line), stdin);

for (i = 0; i < 20; i++) {

s[i] = 0;

}

printf("mem\top\ta1\ta2\n");

for (i = 2; line[i] != '\0'; i++) {

if ((line[i] == '+' || line[i] == '-' || line[i] == '\*' || line[i] == '/') && s[i] == 0) {

if (s[i + 1] == 0) {

printf("\n(%d)\t:=\t%c\t\t\n", m, line[i + 1]);

m++;

s[i + 1] = t++;

}

printf("(%d)\t%c\t", m, line[i]);

m++;

if (s[i - 1] == 0) {

printf("%c\t", line[i - 1]);

} else {

printf("(%d)\t", s[i - 1]-1 );

}

printf("(%d)\t", prevMem);

s[i - 1] = s[i + 1] = t++;

s[i] = 1;

prevMem = m;

}

}

return 0;

}

OUTPUT:

Enter string: i\*(i+i)\*i

mem op a1 a2

(0) := (

(1) \* i (0)

(2) := i

(3) + i (2)

(4) := i

(5) \* ) (4)

--------------------------------

Process exited after 35.5 seconds with return value 0

Press any key to continue . . .

