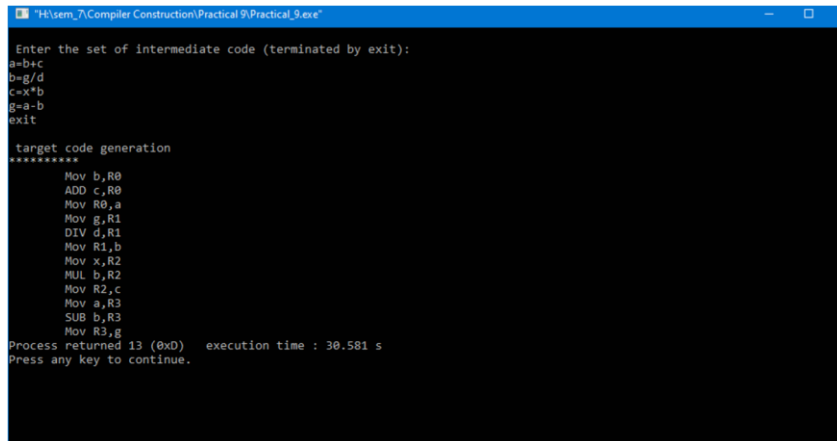


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Practical 9

Title: Assembly Code Generator Output:



```
"H:\sem_7\Compiler Construction\Practical 9\Practical_9.exe"
Enter the set of intermediate code (terminated by exit):
a+b*c
b=g/d
c=x*b
g=a-b
exit

target code generation
*****
      Mov b,R0
      ADD c,R0
      Mov R0,a
      Mov g,R1
      DIV d,R1
      Mov R1,b
      Mov x,R2
      MUL b,R2
      Mov R2,c
      Mov a,R3
      SUB b,R3
      Mov R3,g
Process returned 13 (0xD)   execution time : 30.581 s
Press any key to continue.
```

Code:

```
#include <stdio.h>
#include <stdio.h>
#include <conio.h> #include <string.h> void
main() {
char icode[10][30], str[20], opr[10]; int i = 0;
printf("\n Enter the set of intermediate code (terminated by exit):\n"); do
{
scanf("%s", icode[i]);
} while (strcmp(icode[i++], "exit") != 0); printf("\n target code generation");
printf("\n*****");
i = 0; do { strcpy(str, icode[i]); switch (str[3]) {
case '+': strcpy(opr, "ADD "); break; case '-':
strcpy(opr, "SUB "); break; case '*':
strcpy(opr, "MUL "); break;
case '/': strcpy(opr,
"DIV "); break;
}
printf("\n\tMov %c,R%d", str[2], i);
printf("\n\t%s%c,R%d", opr, str[4], i);
printf("\n\tMov R%d,%c", i, str[0]); } while
(strcmp(icode[++i], "exit") != 0); getch();
}
```