

13. back end of the compiler

```
#include<stdio.h>

#include<stdio.h>

//#include<conio.h>

#include<string.h>

int main()

{

    char icode[10][30],str[20],opr[10];

    int i=0;

    //clrscr();

    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();
}

```

Output:

```

14 } while(strcmp(icode[i++], "exit") != 0);
15 printf("\n target code generation");

C:\Users\hp\OneDrive\Documents\Compiler Design\13. back end of the compiler.exe

Enter the set of intermediate code (terminated by exit):
a*b
b*a
k%1
A=
A+b
B-a
e*e
A*e
B-r
m+w
a+b
a+b

-----
Process exited after 106.2 seconds with return value 3221225477
Press any key to continue . . .

```