3rd year cse lab programs

As per the anna university regulations - 2004, cs 1356 compilers lab and cs 1355 graphics and multimedia lab programs will be available here... u can also request for prog to this mail id cse.achievers@gmail.com...will be published soon...

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intermediate code generation

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program:

```
#include"stdio.h"
#include"conio.h"
#include"string.h"
int i=1,j=0,no=0,tmpch=90;
char str[100],left[15],right[15];
void findopr();
void explore();
void fleft(int);
void fright(int);
struct exp
{
 int pos;
 char op;
}k[15];
void main()
{
 clrscr();
 printf("\t\tINTERMEDIATE CODE GENERATION\n\n");
 printf("Enter the Expression :");
 scanf("%s",str);
 printf("The intermediate code:\t\tExpression\n");
 findopr();
 explore();
 getch();
}
void findopr()
{
 for(i=0;str[i]!='\0';i++)
  if(str[i]==':')
  {
  k[j].pos=i;
  k[j++].op=':';
  }
 for(i=0;str[i]!='\0';i++)
  if(str[i]=='/')
  {
  k[j].pos=i;
  k[j++].op='/';
  }
 for(i=0;str[i]!='\0';i++)
  if(str[i]=='*')
  {
  k[j].pos=i;
  k[j++].op='*';
  }
 for(i=0;str[i]!='\0';i++)
  if(str[i]=='+')
```

```
 {
 k[j].pos=i;
 k[j++].op='+';
 }
for(i=0;str[i]!='\0';i++)
 if(str[i]=='-')
 {
 k[j].pos=i;
 k[j++].op='-';
 }
}
void explore()
{
 i=1;
 while(k[i].op!='\0')
 {
 fleft(k[i].pos);
 fright(k[i].pos);
 str[k[i].pos]=tmpch--;
 printf("\t%c := %s%c%s\t\t",str[k[i].pos],left,k[i].op,right);
 for(j=0;j <strlen(str);j++)
  if(str[j]!='$')
   printf("%c",str[j]);
 printf("\n");
 i++;
 }
 fright(-1);
 if(no==0)
 {
 fleft(strlen(str));
 printf("\t%s := %s",right,left);
 getch();
 exit(0);
 }
 printf("\t%s :=  %c",right,str[k[--i].pos]);
 getch();
}
void fleft(int x)
{
 int w=0,flag=0;
 x--;
 while(x!= -1 &&str[x]!= '+'
&&str[x]!='*'&&str[x]!='='&&str[x]!='\0'&&str[x]!='-
'&&str[x]!='/'&&str[x]!=':')
 {
 if(str[x]!='$'&& flag==0)
 {
 left[w++]=str[x];
 left[w]='\0';
 str[x]='$';
 flag=1;
 }
 x--;
 }
}
void fright(int x)
{
 int w=0,flag=0;
 x++;
 while(x!= -1 && str[x]!=
'+'&&str[x]!='*'&&str[x]!='\0'&&str[x]!='='&&str[x]!=':'&&str[x]!='-
'&&str[x]!='/')
 {
 if(str[x]!='$'&& flag==0)
 {
 right[w++]=str[x];
 right[w]='\0';
 str[x]='$';
 flag=1;
```

```
 }
 x++;
 }
}
```

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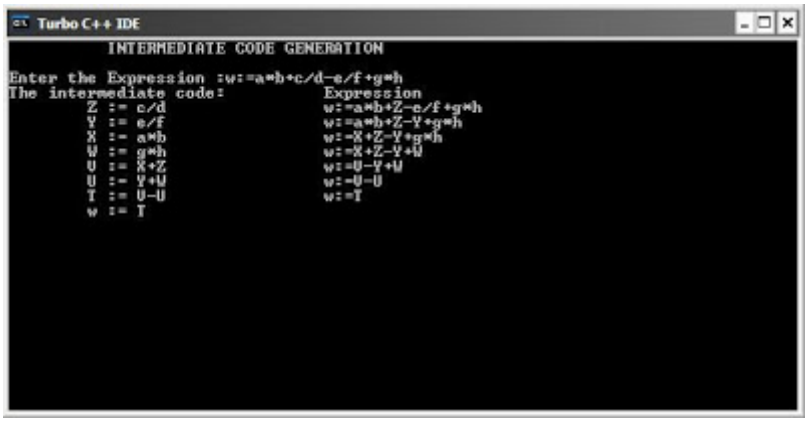
Output:



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Posted by cselab at 11:53 PM
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