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/*-----
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----*/

#include <bits/stdc++.h>

using namespace std;

int preced(char c){

    if(c == '^')
        return 3;
    else if(c == '/' || c=='*')
        return 2;
    else if(c == '+' || c == '-')
        return 1;
    else
        return -1;

}

int main()
{
    cout<<"Enter expression:\n";
    string s;
    cin>>s;
    string s1="";
    stack<char> opn;
    for(int i=0;i<s.length();i++){
        if((s[i]>='a' && s[i]<='z') || (s[i]>='A' && s[i]<='Z')){
            s1+=s[i];
        }
        else{
            while(!opn.empty() && (preced(opn.top()) >= (preced(s[i])))){
                s1+=opn.top();
                opn.pop();
            }
            opn.push(s[i]);
        }
    }
}

```

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    }
}
while (!opn.empty()) {
    s1+=opn.top();
    opn.pop();
}
//cout<<s1<<endl;
stack<char> eval;
int j;
char c1,c2;
cout<<"3 address code:\n";
for(j=0;j<s1.size();j++){
    if((s1[j]>='a' && s1[j]<='z') || (s1[j]>='A' && s1[j]<='z') ){

        eval.push(s1[j]);
//cout<<eval.top()<<endl;
    }
    else{

        c1=eval.top();
        eval.pop();
        c2=eval.top();
        eval.pop();
        char p='A'+j-1;
        cout<<p<<"="<<c1<<s1[j]<<c2<<endl;

        //<<j<<endl;
        eval.push('A'+j-1);

    }
}

return 0;
}

```

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE

```
PS D:\SEM6\spcc> cd "d:\SEM6\spcc\" ; if ($?) { g++ tempCodeRunnerFile.cpp -o tempCodeRunnerFile } ; if ($?) { .\tempCodeRunnerFile }
Enter expression:
a/b+c*d/f
3 address code:
B=b/a
E=d*c
G=f/E
H=G+B
PS D:\SEM6\spcc> █
```