## 116 Pascal User Manual

which are formed according to the EBNF below. A period terminates the input.

```
Expression = Term \{ ("+" | "-") Term \}.
 Term = Factor \{ "*" Factor \}.
 Factor = Identifier "(" Expression ")".
 Identifier = Letter.
program PostFix(Input,Outpu');
   { Program 11.5 - Convert an infix expression to
                    Polish | ostfix form. }
  label 13 { premature end f file };
  var
    Ch: Char;
  procedure Find;
  begin
    if Eof(Input) then goto 13;
    repeat Read(Input, Ch);
    until (Ch <> ' ') or Eo: (Input)
  end { Find };
  procedure Expression;
    var
      Op: Char;
    procedure Term;
      procedure Factor;
      begin
        if Ch = '(' then
          begin Find; Expression; { Ch = ')' } end
        else
          Write (Output, Ch);
        Find
      end { Factor };
    begin { Term }
      Factor;
      while Ch = '*' do
        begin Find; Factor; Write(Output, '*') end
    end { Term };
  begin { Expression }
    Term;
    while (Ch = '+') or (Ch = '-') do
        Op := Ch; Find; Term; Write (Output, Op)
      end
  end { Expression };
```