

1. Write a BNF description for a for statement in C.

```
<for loop> ::=
for '(' < expression >; < expression>; < expression> ')'
{' <statement> '}
```

2. Convert the BNF in number 1 to EBNF.

```
<for loop> ::=
for '(' <init-expression> {,<init-expression>}; <conditional-expression> {,<conditional-expression>;}
(<inc >|<dec>) {, (<inc >|<dec>)} ')'
{'
<statement_list>
'}
```

```
<init-expression> -> int <var> '=' (<digit>|<iden>)
<conditional-expression> -> <iden> <relational operator> (<digit>|<iden>)
<inc> -> (<iden>++ | ++<iden>)
<dec> -> (<dec>-- | --<dec>)
```