Method 1: \#define

\#define START 0
\#define INCHARLITERAL 1
\#define INSTRINGLITERAL 2
\#define MAYBEINCOMMENT 3
\#define INCOMMENT 4
\#define MAYBEOUTOFCOMMENT 5
\#define ESCAPEINCHARLITERAL 6
\#define ESCAPEINSTRINGLITERAL 7

int main(void)
{
    int iState;
    ...
    iState = START;
    ...
}

Method 2: "const" Variables

int main(void)
{
    const int iStart = 0;
    const int iInCharLiteral = 1;
    const int iInStringLiteral = 2;
    const int iMaybeInComment = 3;
    const int iInComment = 4;
    const int iMaybeOutOfComment = 5;
    const int iEscapeInCharLiteral = 6;
    const int iEscapeInStringLiteral = 7;
    ...
    int iState;
    ...
    iState = iStart;
    ...
}

Note: Compiler is allowed to not allocate storage if it need not.

Method 3: Enumerations

int main(void)
{
    enum State {START, INCHARLITERAL, INSTRINGLITERAL, MAYBEINCOMMENT, INCOMMENT,
                 MAYBEOUTOFCOMMENT, ESCAPEINCHARLITERAL, ESCAPEINSTRINGLITERAL};
    ...
    enum State iState;
    ...
    iState = START;
    ...
    iState = 0;
    ...
}