Lab 3: Write a program for syntax checking of subset of given language using LEX and YACC.

syntax.y

```
%{
#include <stdio.h>
%}
%token DET NOUN PRONOUN VERB  Preposition ADJECTIVE
%nonassoc NOUN

%nonassoc Preposition
%nonassoc CONJ
%%

S1:S1 S
  |S
  ;

S:SS '.' {printf("Simple Sentence");}
 |CS'.' {printf("Compound  Sentence");};

CS:SS CONJ SS {printf("Compound  Sentence");}
  |CS CONJ SS;

SS:NP VP {printf("SS\n");}| VP{printf("1\n");};

NP:DET NOUN {printf("Two No.\n");}
  | NOUN {printf("3\n");}
  | PRONOUN {printf("5\n");}
  | DET NOUN PP {printf("6\n");};
VP:VERB NP {printf("7\n");}| VERB {printf("8\n");} |VP PP {printf("10\n");};
PP:Preposition NP {printf("11\n");};


%%
main()
{
yyparse();
}
int yyerror(char* msg)
{
return 1;
}
```

Syntax.l
```
%{
```

```
#include"y.tab.h"
%}
NOUN "Tarkeshwari"|"Dog"|"Asha"|"Mayuri"|"Monali"|"Pratiksha"|"Car"
VERB "Play"|"Run"|"Sing"|"Act"|"Answer"|"Approve"|"Arrange
Drink"|"Eat"|"Edit"|"Enter"|"Sneeze"|"Solve"|"Study"|"Teach"|"Write"
PREPOSITION "In"|"On"|"Below"|"Above"|"Beside"
ADJECTIVE "Good"|"Bad"|"Big"|"small"|"Tall"|"Short"|"ugly"|"Beautiful"|"Adorable"
PRONOUN "He"|"She"|"It"|"They"|"Them"
DET "a"|"an"|"the"
CONJ ([aA][nN][dD])|([oO][rR])|([bB][uU][tT])
%%
{NOUN} {return NOUN;}
{VERB} {return VERB;}
{PREPOSITION} {return Preposition;}
{ADJECTIVE} {return ADJECTIVE;}
{PRONOUN} {return PRONOUN;}
{DET} {return DET;}
{CONJ} {return CONJ;}
"." {return yytext[0];}
.|\n   {}
%%
int yywrap()
{
return 1;
}
```

OUTPUT: