

%{

#include<stdio.h>

#include "y.tab.h"

%}

verb

is|are|was|were|be|being|been|does|do|did|will|would|should|can|could|have|has|go|play|run|  
work|write|read

adverb very|slowly|gently|calmly|quietly

preposition to|from|above|behind|below|between

conjunction if|then|and|but|or|also|so

adjective beautiful|cool|hot|calm|delightful|great|small|tall|big|small|tiny|little|large

pronoun he|she|it|they|I|this|you

noun [a-zA-Z]+

%%

{verb} {return VERB;}

{adverb} {return ADVERB;}

{preposition} {return PREPOSITION;}

{conjunction} {return CONJUNCTION;}

{adjective} {return ADJECTIVE;}

{pronoun} {return PRONOUN;}

{noun} {return NOUN;}

"\n" {return NL;}

%%

```

%{
    #include <stdio.h>
    #include <stdlib.h>
    int yylex();
    int yyerror();
}%

%token NOUN PRONOUN ADJECTIVE ADVERB VERB PREPOSITION CONJUNCTION NL

%%

sentence : simple_sentence NL {printf("Parsed a simple sentence \n"); exit(0);}
          | compound_sentence NL {printf("Parsed a Compound sentence \n"); exit(0);}
          ;

simple_sentence : subject verb object
               | subject verb object prep_phrase
               ;

compound_sentence : simple_sentence CONJUNCTION object
                  | simple_sentence CONJUNCTION simple_sentence
                  | simple_sentence CONJUNCTION CONJUNCTION object
                  | compound_sentence CONJUNCTION simple_sentence
                  ;

subject : NOUN
        | PRONOUN
        | ADJECTIVE subject
        ;

verb : VERB
     | ADVERB VERB

```

| verb VERB

;

object : NOUN

| ADJECTIVE object

;

prep\_phrase : PREPOSITION NOUN

;

%%

int main()

{

    yyparse();

}

int yyerror()

{

    printf("Invalid Statement\n");

}

int yywrap()

{

    return 1;

}

```
student@system13:~$ lex rn16.l
```

```
student@system13:~$ yacc -d rn16.y
```

```
student@system13:~$ gcc lex.yy.c y.tab.c
```

```
student@system13:~$ ./a.out
```

I play cricket and chess

Parsed a Compound sentence

```
student@system13:~$ yacc -d rn16.y
```

```
student@system13:~$ gcc lex.yy.c y.tab.c
```

```
student@system13:~$ ./a.out
```

I play cricket and also chess

Parsed a Compound sentence