1. Write a Lex program that copies a file, replacing each nonempty sequence of white space by a single blank.
2. Write a Lex program that copies a C program, replacing each instance of the keyword float with double.
3. Write a Lex program which will modify the words in the following way:
    a. If the first letter is a consonant, move it to the end of the word and then add ay.
    b. If the first letter is a vowel, just add ay to the end of the word.
4. Write a Lex program to identify identifiers from a given input source file.
5. Write a Lex program to count the number of vowels and consonants from an input file and write the results to a file.
6. Write a Lex program to count the number of lines in a given input source file.
7. Write a Lex program to count the number of comment lines in a c program. Also eliminate that comment line. (input read from file).
8. Write a Lex program to identify correctly an inputted 8 bit binary numbers.
9. Write a YACC program to convert an infix expression into an postfix expression.
10. Write a lex program to find out all the tokens from the following input C program. (input read from file)

```
int main()
{
// 2 variables
int a, b;
a = 10;
return 0;
}
```

11. Write a lex program to count the number of tokens and find out all the tokens from the following input C program. (input read from file)

```
int main()
{
int a = 10, b = 20, c;
c=a+b;
printf(“sum is :%d”,c);
return 0;
}
```

12. Write a C program to implement the transition diagram for
    a. Unsigned numbers
    b. Integers
    c. Real numbers
    d. Identifiers
    e. Relational operators
13. Write a lex program to identify all the numbers in an input text and then perform the sum of the numbers.

14. Write a lex program to count the number of the word “the” in an input text.
15. Write a lex program to count the number of stopwords and remove all of them.
16. Write a YACC program to design a simple calculator.
17. Write a Lex program to design a simple calculator.
18. Write a lex program to count the number of palindromes present in a input text and write them to a separate text file.
19. Write a lex program to check valid arithmetic expressions.
20. Write a lex program to find the length of an input text.
21. Write a lex program to reverse all the words in an input text.
22. Write a lex program to find the smallest word in an input text.
23. Write a lex program to convert lowercase characters to uppercase.
24. Write a lex program to sort all the words in an input text as per their length.