CS 324Compiler Design Lab

short line

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# Experiment 1

## Write a program to check whether the input string is a keyword or not.

### Source Code:

| %{  // Program to check if input word  // is a keyword or not %} keywords (if|else|for|do|while|break|continue|switch|case|default|int|char) %% {keywords}+ {ECHO; printf(" is a keyword\n\n");}; .\* {printf(ECHO; " is not a keyword\n\n");}; %% int main() {  yylex(); } int yywrap(void) {  return 0; } |
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### Compiling and running the above lex code:

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# Experiment 2

## Write a program to check whether the input string is a valid identifier or not.

### Source Code:

| %{  //Valid Identifiers %} id [a-zA-Z\_][a-zA-Z\_0-9]\* %% {id} {ECHO; printf(" is a Valid Identifier\n\n");}; .+ {ECHO; printf(" is an invalid Identifier\n\n");}; %% int main() {  yylex(); } int yywrap(void) {  return 0; } |
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### Compiling and running the above lex code:

# Experiment 3

## Write a program to check whether the given input is a valid operator or not.

### Source Code:

| %{  // Program to check valid operators %} ari\_operators [+\-\*\/%&\|^<>]|"<="|">="|"++"|"--" log\_operators "&&"|"||"|"!" %% {ari\_operators} {ECHO; printf(" is an arithmetic operator\n");}; {log\_operators} {ECHO; printf(" is a logical operator\n");}; .\* {ECHO; printf(" is not a valid operator\n");}; %% int main() {  yylex(); } int yywrap(void) {  return 0; } |
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### Compiling and running the above lex code:

# Experiment 4

## Write a program to check whether the given input string is an integer, floating-point number or none of these.

### Source Code:

| %{  // Program to check if input is  // an integer, float or none %} digit [0-9] integer {digit}+ floating {digit}+"."{digit}+ %% {integer} {ECHO; printf(" is an integer\n");}; {floating} {ECHO; printf(" is a floating-point number\n");}; .\* {ECHO; printf(" is neither an integer nor a floating point number.\n");}; %% int main() {  yylex(); } int yywrap(void) {  return 0; } |
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### Compiling and running the above lex code:

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