**1.Develop a lexical Analyzer to identify identifiers, constants, operators using C program.**

**CODE:**

#include <stdio.h>

#include <ctype.h>

void lexicalAnalyzer(const char \*input) {

while (\*input) {

if (isspace(\*input)) input++;

else if (isdigit(\*input)) {

printf("Constant: %c\n", \*input++);

} else if (isalpha(\*input) || \*input == '\_') {

printf("Identifier: %c\n", \*input++);

} else {

printf("Operator: %c\n", \*input++);

}

}

}

int main() {

char input[100];

printf("Enter a string: ");

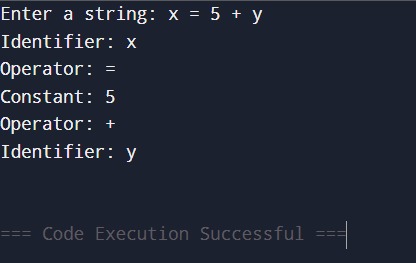
fgets(input, sizeof(input), stdin);

lexicalAnalyzer(input);

return 0;

}

**OUTPUT:**

****