**PROGRAM 1:**

#include <stdio.h>

#include <ctype.h>

void analyze(char \*input) {

int i = 0;

while (input[i] != '\0') {

if (isspace(input[i])) i++;

else if (isalpha(input[i])) printf("Identifier: %c\n", input[i++]);

else if (isdigit(input[i])) printf("Constant: %c\n", input[i++]);

else printf("Operator: %c\n", input[i++]);

}

}

int main() {

char input[100];

printf("Enter input: ");

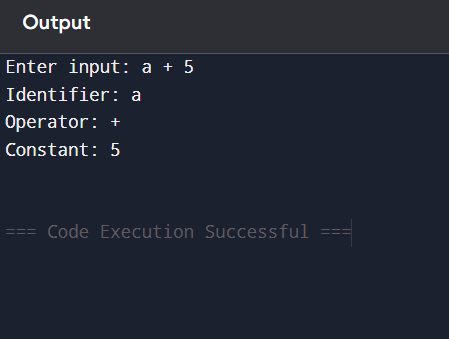
fgets(input, sizeof(input), stdin);

analyze(input);

return 0;

}

**OUTPUT:**

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