#include <stdio.h>

int main() {

char str[100];

int count[5] = {0}; // Initialize count array with zeros

printf("Enter a string: ");

fgets(str, 100, stdin); // Read input string

for (int i = 0; str[i] != '\0'; i++) {

char ch = str[i];

if (ch >= 'A' && ch <= 'Z') {

count[0]++; // Uppercase alphabet

printf("%c is an uppercase alphabet\n", ch);

} else if (ch >= 'a' && ch <= 'z') {

count[1]++; // Lowercase alphabet

printf("%c is a lowercase alphabet\n", ch);

} else if (ch >= '0' && ch <= '9') {

count[2]++; // Digit

printf("%c is a digit\n", ch);

} else if (ch == ' ' || ch == '\t' || ch == '\n') {

count[3]++; // Whitespace

printf("%c is a whitespace character\n", ch);

} else {

count[4]++; // Special symbol

printf("%c is a special symbol\n", ch);

}

}

printf("Count of uppercase alphabets: %d\n", count[0]);

printf("Count of lowercase alphabets: %d\n", count[1]);

printf("Count of digits: %d\n", count[2]);

printf("Count of whitespace characters: %d\n", count[3]);

printf("Count of special symbols: %d\n", count[4]);

return 0;

}