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#include <stdio.h>
#include <string.h>

int main(){
    char str[500];
    scanf("%s",str);
    int val, hash1 = 0, hash2 = 1, i, len = strlen(str);

    for(i = 0; i < len; i++){
        // Take care of digits
        if('0' <= str[i] && str[i] <= '9')
            val = str[i] - '0';
        // Take care of lower-case alphabets
        else if('a' <= str[i] && str[i] <= 'z')
            val = str[i] - 'a' + 1;
        // Take care of upper-case alphabets
        else if('A' <= str[i] && str[i] <= 'Z')
            val = str[i] - 'A' + 1;
        else
            printf("Illegal character\n");
        hash1 += val;
        // Apply modulo arithmetic trick
        // (a * b * c) mod k = ((a * b) mod k * c mod k)mod k
        hash2 = (hash2 * val) % 100000;
    }

    printf("%d\n%d", hash1, hash2);

    return 0;
}
```