<https://github.com/Jhuna1234/Dsa>

#include <stdio.h>

#include <string.h>

#include <ctype.h>

#define MAX\_EMAIL\_LENGTH 500

#define NUM\_SPAM\_KEYWORDS 10

const char \*spamKeywords[NUM\_SPAM\_KEYWORDS] = {

"free", "win", "winner", "click here", "buy now", "urgent",

"limited time", "lottery", "money", "offer"

};

void toLowerCase(char \*str) {

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

str[i] = tolower((unsigned char) str[i]);

}

}

int isSpam(const char \*email) {

char lowerEmail[MAX\_EMAIL\_LENGTH];

strncpy(lowerEmail, email, MAX\_EMAIL\_LENGTH);

lowerEmail[MAX\_EMAIL\_LENGTH - 1] = '\0';

toLowerCase(lowerEmail);

for (int i = 0; i < NUM\_SPAM\_KEYWORDS; i++) {

if (strstr(lowerEmail, spamKeywords[i]) != NULL) {

return 1; // Email is spam

}

}

return 0; // Email is not spam

}

int main() {

char email[MAX\_EMAIL\_LENGTH];

printf("Email Spam Filter\n");

printf("Spam Keywords:\n");

for (int i = 0; i < NUM\_SPAM\_KEYWORDS; i++) {

printf("- %s\n", spamKeywords[i]);

}

while (1) {

printf("\nEnter an email (or type 'exit' to quit): ");

fgets(email, MAX\_EMAIL\_LENGTH, stdin);

email[strcspn(email, "\n")] = 0; // Remove newline character

if (strcmp(email, "exit") == 0) {

break;

}

if (isSpam(email)) {

printf("The email is classified as: SPAM\n");

} else {

printf("The email is classified as: NOT SPAM\n");

}

}

return 0;

}