Q1) #include <stdio.h>

int main() {

int n;

printf("Enter the number of integers: ");

scanf("%d", &n);

if (n <= 0) {

printf("Invalid input. Please enter a positive integer.\n");

return 1;

}

int arr[n];

double sum = 0.0;

printf("Enter %d integers:\n", n);

for (int i = 0; i < n; ++i) {

scanf("%d", &arr[i]);

sum += arr[i];

}

double average = sum / n;

printf("The average of the entered integers is: %.2lf\n", average);

return 0;

}

Q2) #include <stdio.h>

char toLowerCaseChar(char ch) {

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

return ch + ('a' - 'A');

}

return ch;

}

int isDelimiter(char ch) {

return ch == ' ' || ch == ',' || ch == '.' || ch == '!' || ch == '?' || ch == '\n' || ch == '\t';

}

int compareStrings(char \*str1, char \*str2) {

while (\*str1 && \*str2) {

if (\*str1 != \*str2) {

return \*str1 - \*str2;

}

str1++;

str2++;

}

return \*str1 - \*str2;

}

void copyString(char \*dest, const char \*src) {

while (\*src) {

\*dest++ = \*src++;

}

\*dest = '\0';

}

int findWord(char words[MAX\_WORDS][MAX\_WORD\_LENGTH], int wordCount, char \*word) {

for (int i = 0; i < wordCount; i++) {

if (compareStrings(words[i], word) == 0) {

return i;

}

}

return -1;

}

int main() {

char paragraph[5000];

char words[MAX\_WORDS][MAX\_WORD\_LENGTH];

int frequency[MAX\_WORDS] = {0};

int wordCount = 0;

printf("Enter a paragraph: ");

fgets(paragraph, sizeof(paragraph), stdin);

char currentWord[MAX\_WORD\_LENGTH];

int currentIndex = 0;

int i = 0;

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

if (isDelimiter(paragraph[i])) {

if (currentIndex > 0) {

currentWord[currentIndex] = '\0';

// Convert to lowercase

for (int j = 0; j < currentIndex; j++) {

currentWord[j] = toLowerCaseChar(currentWord[j]);

}

int index = findWord(words, wordCount, currentWord);

if (index == -1) {

copyString(words[wordCount], currentWord);

frequency[wordCount]++;

wordCount++;

} else {

frequency[index]++;

}

currentIndex = 0;

}

} else {

currentWord[currentIndex++] = paragraph[i];

}

i++;

}

if (currentIndex > 0) {

currentWord[currentIndex] = '\0';

// Convert to lowercase

for (int j = 0; j < currentIndex; j++) {

currentWord[j] = toLowerCaseChar(currentWord[j]);

}

int index = findWord(words, wordCount, currentWord);

if (index == -1) {

copyString(words[wordCount], currentWord);

frequency[wordCount]++;

wordCount++;

} else {

frequency[index]++;

}

}

printf("\nWord Frequencies:\n");

for (int i = 0; i < wordCount; i++) {

printf("%s: %d\n", words[i], frequency[i]);

}

return 0;

}