

**МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ НАЦІОНАЛЬНОМУ УНІВЕРСИТЕТУ
“ЛЬВІВСЬКА ПОЛІТЕХНІКА”**

Кафедра систем штучного інтелекту

Лабораторна робота з дисципліни «Алгоритмізація і програмування»

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22.

- 1) Скопіювати з файлу F1 у файл F2 всі рядки, у яких більше 2 слів.
- 2) Визначити номер слова у якому найбільше голосних.

Текст програми:

```
#include
<stdio.h>
>

#include <string.h>

#define max_size 255

int check_words(char k[max_size])
{
    int word = 0;
    char *token;

    token = strtok(k, " ,.!?" );

    while (token != NULL)
    {
        token = strtok(NULL, " ,.!?" );
        word++;
    }

    return word;
}

void enter_strings(FILE *fp)
{
    char string[max_size];

    fp = fopen("F1.txt", "w");
```

```

if (fp != NULL)
{
    for (int i = 0; i < 10; i++)
    {
        printf("Enter string #%i: \n", i+1);

        fgets(string, 255, stdin);

        fprintf(fp, "%s", string);
    }

    fclose(fp);
}
else
{
    printf("hooooops...error!");

    fclose(fp);
}
}

```

```

void copy_strings(FILE *fp, FILE *fp1)
{
    fp = fopen("F1.txt", "r");
    fp1 = fopen("F2.txt", "w");

    char buf[max_size], reserv[max_size];

    if (fp != NULL && fp1 != NULL)
    {
        while(fgets(buf, max_size, fp) != NULL)
        {
            int number_words;

            strcpy(reserv, buf);

            number_words = check_words(reserv);

```

```

        if(number_words > 2)
        {
            fputs(buf, fp1);
        }
    }

    fclose(fp);

    fclose(fp1);
}

else
{
    printf("ERROR!");

    fclose(fp);

    fclose(fp1);
}
}

void number_word(FILE *fp)
{
    fp = fopen("F2.txt", "r");

    char buf[max_size], *ptr;

    int word = 1, counter = 0, number_word = 0, i = 1;

    if (fp != NULL)
    {
        while(fgets(buf, max_size, fp) != NULL)
        {
            int max = 0;

            word = 1;

            ptr = strtok(buf, " ,.!?");

```

```

while (ptr != NULL)
{
    for(int i = 0; i < strlen(ptr); i++)
    {
        if(ptr[i] == 'a' || ptr[i] == 'e' || ptr[i] ==
'i' || ptr[i] == 'o' || ptr[i] == 'u' || ptr[i] == 'y')
        {
            counter++;
        }
        else if(ptr[i] == 'A' || ptr[i] == 'E' || ptr[i]
== 'I' || ptr[i] == 'O' || ptr[i] == 'U' || ptr[i] == 'Y')
        {
            counter++;
        }
    }

    if(counter > max)
    {
        max = counter;
        number_word = word;
    }

    counter = 0;

    ptr = strtok(NULL, " ,.!?");

    word++;
}

printf("In %i string number of word which has max loud
letters is %i\n", i, number_word);
i++;
}
}

```

```

        fclose(fp);
    }

    int main (void)
    {
        FILE *F1 = NULL, *F2 = NULL;

        enter_strings(F1);

        copy_strings(F1, F2);

        number_word(F2);
    }

```

Результат:

The screenshot shows a virtual machine window titled "Oracle VM VirtualBox" with a guest OS of "Ubuntu 14.04 LTS (64-bit)". The window contains a file manager and a terminal. The file manager shows three files: "lab9.c", "F2.txt", and "F1.txt". The terminal displays the following output:

```

jharvard@appliance: ~/Project/Lab/AlgoAndProg/Lab 9: ./lab9
Enter string #1:
Arsen Podoba Myroslavovych
Enter string #2:
It was my name
Enter string #3:
And
Enter string #4:
I am a programmer
Enter string #5:
I like it
Enter string #6:
yeaah
Enter string #7:
my program
Enter string #8:
It is cool
Enter string #9:
yeaah
Enter string #10:
uraaa!
In 1 string number of word which has max loud letters is 3
In 2 string number of word which has max loud letters is 4
In 3 string number of word which has max loud letters is 4
In 4 string number of word which has max loud letters is 2
In 5 string number of word which has max loud letters is 3
jharvard@appliance: ~/Project/Lab/AlgoAndProg/Lab 9:

```

