

מטלה 8 – מחרוזות

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שאלה 1 – א'

```
#define SIZE 30
#include <stdio.h>
#include <string.h>
int findLastIndex(char str[], char tav);
int main()
{
    char str[SIZE], tav;
    int index;
    printf("Please insert a String up to %d words: \n",
SIZE-1);
    gets(str);
    printf("Please insert a Char: ");
    scanf(" %c", &tav);
    index = findLastIndex(str, tav);
    printf("'%c' found at index: %d\n", tav, index);
}
int findLastIndex(char str[], char tav)
{
    int countOfTav = strlen(str);
    int check = 0;
    for (int i = 0; i < countOfTav; i++)
    {
        if (str[i] == tav)
        {
            check = i + 1;
        }
    }
    if (check != 0)
    {
        return check - 1;
    }
    return -1;
}
```

```
Please insert a String up to 29 words:
warning: this program uses gets(), which is unsafe.
from the sea to the shining c
Please insert a Char: n
'n' found at index: 25
Program ended with exit code: 0
```

```

#define SIZE 30
#include <stdio.h>
#include <string.h>
int findNndAppereanceIndex(char str[], char tav, int
num);
int main()
{
    char str[SIZE], tav;
    int index, num;
    printf("Please insert String up to %d words: \n",
SIZE-1);
    gets(str);
    printf("Please insert a Char: ");
    scanf(" %c", &tav);
    printf("Please insert a number: ");
    scanf("%d", &num);
    index = findNndAppereanceIndex(str, tav, num);
    printf("%drd '%c' found at index: %d\n", num, tav,
index);
}
int findNndAppereanceIndex(char str[], char tav, int num)
{
    int countOfTav = strlen(str);
    int check = 0, count = 0;
    for (int i = countOfTav - 1; i >= 0; i--)
    {
        if (str[i] == tav)
        {
            check = i;
            count++;
        }
        if (count == num)
        {
            return check;
        }
    }
    return -1;
}

```

```

Please insert String up to 29 words:
warning: this program uses gets(), which is unsafe.
from the sea to the shining c
Please insert a Char: h
Please insert a number: 3
3rd 'h' found at index: 6
Program ended with exit code: 0

```

```

#define SIZE 30
#include <stdio.h>
#include <string.h>
void left_Trim(char str[]);
int main()
{
    char str[SIZE];
    printf("Please insert a string up to %d words: \n",
SIZE-1);
    gets(str);
    left_Trim(str);
    printf("%s", str);
}
void left_Trim(char str[])
{
    int counttav = strlen(str);
    while (str[counttav-1] == ' ')
    {
        str[counttav-1] = '\0';
        counttav--;
    }
}

```

```

Please insert a string up to 29 words:
warning: this program uses gets(), which is unsafe.
love is love
love is loveProgram ended with exit code: 0

```

```

#define SIZE 30
#include <stdio.h>
#include <string.h>
void right_Trim(char str[]);
int main()
{
    char str[SIZE];
    printf("Please insert a string up to %d words: \n",
SIZE - 1);
    gets(str);
    right_Trim(str);
    printf("%s\n", str);
}
void right_Trim(char str[])
{
    int countOfTav = strlen(str);
    int i = 0;
    while (str[i] == ' ')
    {
        i++;
    }
    for (int j = 0; j < countOfTav; j++)
    {
        str[j] = str[i];
        i++;
    }
}

```

```

Please insert a string up to 29 words:
warning: this program uses gets(), which is unsafe.
    love is love
love is love
Program ended with exit code: 0

```

```

#define SIZE 30
#include <stdio.h>
#include <string.h>
void left_Trim(char str[]);
void right_Trim(char str[]);
void my_trim(char str[]);
int main()
{
    char str[SIZE];
    printf("Please insert a string up to %d words: \n",
SIZE - 1);
    gets(str);
    my_trim(str);
    printf("%s", str);
}
void my_trim(char str[])
{
    left_Trim(str);
    right_Trim(str);
}
void left_Trim(char str[])
{
    int counttav = strlen(str);
    while (str[counttav-1] == ' ')
    {
        str[counttav-1] = '\0';
        counttav--;
    }
}
void right_Trim(char str[])
{
    int countOfTav = strlen(str);
    int i = 0;
    while (str[i] == ' ')
    {
        i++;
    }
    for (int j = 0; j < countOfTav; j++)
    {
        str[j] = str[i];
        i++;
    }
}

```

```
Please insert a string up to 29 words:  
warning: this program uses gets(), which is unsafe.  
    love is love  
love is loveProgram ended with exit code: 0
```

```

#define SIZE 30
#include <stdio.h>
#include <string.h>
int maxLen(char str[]);
int main()
{
    char str[SIZE];
    int countMaxWord = 0;
    printf("Please insert a string up to %d words: \n",
SIZE - 1);
    gets(str);
    countMaxWord = maxLen(str);
    printf("The count letters of Max Word is: %d\n",
countMaxWord);
}
int maxLen(char str[])
{
    int countOfTav = strlen(str);
    int countMax = 0, tempMaxWord = 0;
    for (int i = 0; i < countOfTav; i++)
    {
        if(str[i] != ' ')
        {
            countMax++;
        }
        else
        {
            if (countMax > tempMaxWord)
            {
                tempMaxWord = countMax;
            }
            countMax = 0;
        }
    }
    if (countMax > tempMaxWord)
    {
        tempMaxWord = countMax;
    }
    return tempMaxWord;
}

```

```
Please insert a string up to 29 words:  
warning: this program uses gets(), which is unsafe.  
bob and anna went to a gig  
The count letters of Max Word is: 4  
Program ended with exit code: 0
```

```
Please insert a string up to 29 words:  
warning: this program uses gets(), which is unsafe.  
thanks for a god  
The count letters of Max Word is: 6  
Program ended with exit code: 0
```