

```

char** split = string (char* str);
char** split = NULL;
char* token = strtok(str, " ");

```

```

int spaces = 0;

```

```

while (token)
{
    split = realloc(split,
    sizeof(char*) * ++spaces);
}

```

```

if (!split)
    return split;
}

```

```

split[spaces-1] = token;
token = strtok(NULL, " ");
return split;
}

```

```

int parse_int (char* str)
{
    char* endptr;
    int value = strtol(str, &endptr, 10);
}

```

```

if (endptr == str || *endptr != '\0')
{
    return EXLT_FAILURE;
}
return value;
}

```

Date: 2/1/2021

Friday

```
char* trim(char* str) {  
    if (!str) {  
        return 0;  
    }
```

```
    while (*str == ' ' || *str == '\t')  
        str++;  
    return str;
```

```
    while (*str != '\0')  
        str++;  
    str--;
```

```
    return str;
```

```
char* reverse(char* str) {  
    if (!str) {  
        return 0;  
    }
```

```
    if (!*str) {  
        return str;
```

```
    char* end = str + strlen(str) - 1;
```

```
    while (end > str) {  
        swap(str, end);  
        end--;
```

```
    }  
    return str;
```

```
    return str;
```

```

if (length <= 1)
    data = realloc(data,
    alloc - length);
    if (!data) {
        data = '\0';
        break;
    }
    if (data[data - length - 1] == '\n') {
        data[data - length - 1] = '\0';
        data = realloc(data,
        data - length);
        if (!data) {
            data = '\0';
        }
        else {
            data = realloc(data,
            data - length + 1);
            if (!data) {
                data = '\0';
            }
            else {
                data[data - length] = '\0';
            }
        }
    }
    return data;
}

```

```

    (customers[i] + j) = customer - id;
}

```

```

int result = minimumAverage(n, 2, customers);

```

```

printf("%d\n", result);

```

```

fclose(fptr);

```

```

return 0;

```

```

}

```

```

char* randline() {

```

```

    size_t alloc_length = 1024;

```

```

    size_t data_length = 0;

```

```

    char* buf =

```

```

    malloc(alloc_length);

```

```

    while (true) {

```

```

        char* cur_line = data + data_length;

```

```

        char* line = fgets(cur_line, alloc_length - data_length, stdin);

```

```

        if (!line) {

```

```

            break;

```

```

        }

```

```

        data_length += strlen(line);

```

```

        if (data_length < alloc_length) {

```

```

            data[data_length - 1] = '\0';
        }
    }

```


INTEGER

* The function accepts

2D INTEGER ARRAY customers as parameter.

```
int minimumAverage (int customers - rows, int  
customers - cols, int customers - cols, int  
** customers) {
```

```
}
```

```
int main()
```

```
{
```

```
FILE* fptr =
```

```
fopen ("getenv("C:\path", "w");
```

```
int n =
```

```
parse - int (atoi (getenv ("readline (1)")));
```

```
int ** customers = malloc (n * sizeof (int*));
```

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

```
    * (customers + i) = malloc (2 * (sizeof (int)));
```

```
char ** customers - item - temp = split - string  
(atoi (readline (1)));
```

```
for (int j = 0; j < 2; j++) {
```

```
    int customers - item =
```

```
parse - int (* (customers - item - temp + j));
```

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Q2.2)

```
#include <iostream>
#include <ctype.h>
#include <string.h>
#include <math.h>
#include <stdlib.h>
#include <stdio.h>
#include <vector>
#include <algorithm>
#include <string.h>
#include <string>
```

```
char* minline();
char* trim(char*);
char* rtrim(char*);
char* splice_string(char*);
```

```
int parse_int(char*);
```

```
/*
 * Complete the
 * minimum message function
 * below
 */
```

* The function is expected to return