

```
#include <assert.h>
#include <ctype.h>
#include <limits.h>
#include <math.h>
#include <stdbool.h>
#include <stddef.h>
#include <stdint.h>
#include <stdio.h>
#include <stdlib.h>
#include <string.h>
```

```
char* readline();
char* ltrim(char*);
char* rtrim(char*);
char** split_string(char*);
```

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

```
int minimumAverage(int customers_rows, int customers_cols, int** customers) {
```

```
}
```

```
int main()
```

```
{
```

```
FILE* fptr = fopen(getenv("OUTPUT_PATH"), "w");
```

```
int n = parse_int(ltrim(rtrim(readline())));
```

Ashish


```
int ** customers = malloc (n * size of (int *));
```

```
for (int i = 0; i < n; i++) {
    * (customers + i) = malloc (2 * (size of (int)));
```

```
char ** customers_item_temp = split_string
(trim(readline()));
```

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

```
    int customers_item = parse_int (* (customers_item
    _temp + j));
```

```
    * (* (customers + i) + j) = customers_item;
```

```
}
```

```
}
```

```
int Result = minimum_Average (n, 2, customers);
```

```
fprintf (fptr, "%d\n", result);
```

```
fclose (fptr);
```

```
return 0;
```

```
}
```

```
char * readline () {
```

Alvin

Date _____
Page _____

```
size_t alloc_length = 1024;  
size_t data_length = 0;
```

```
char * data = malloc(alloc_length);
```

```
while (true) {
```

```
    char * cursor = data + data_length;
```

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

```
    if (!line) {  
        break;
```

```
}
```

```
    data_length += strlen(cursor);
```

```
    if (data_length < alloc_length - 1 || data[data_length  
        - 1] == '\n') {  
        break;
```

```
}
```

```
    alloc_length <<= 1;
```

```
    data = realloc(data, alloc_length);
```

```
    if (!data) {
```

```
        data = "0";
```

~~return~~

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';

}

}

Wshiratt

return data ;

}

char * utrpm (char * str) {
 pf (| str) {

return '0' ;

}

pf (| * str) {

return str ;

}

while (* str | = '0' && prepare (* str)) {
 str++ ;

}

return str ;

}

char * utrpm (char * str) {
 pf (| str) {
 return '0' ;

}

pf (| * str) {

Adhikari


```
return str;
```

```
}
```

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

```
while (end >= str & !isspace(*end)) {  
    end--;
```

```
}
```

```
* (end + 1) = '\0';
```

```
return str;
```

```
}
```

```
char ** split-string (char * str) {
```

```
    char ** splits = NULL;
```

```
    char * token = strtok (str, " ");
```

```
    int spaces = 0;
```

```
    while (token) {
```

```
        splits = realloc (splits, sizeof (char *) * ++spaces  
        - 1);
```

```
        if (!splits) {
```

Wish

return splits;

}

splits [spaces - 1] = token;

token = strtok (NULL, " ");

}

return splits;

}

int parse_int (Char* Str) {

Char* endptr

int value = strtol (Str, &endptr, 10);

if (endptr == Str || *endptr != '\0') {

exit (EXIT_FAILURE);

}

return value;

}

Ashish

Sample Input # 00

3

0 3

1 9

2 6

Sample output # 00

9

Sample Input # 01

3

0 3

1 9

2 5

Sample output # 01

8

Explanation # 01

Let's call the person ordering at time = 0 as A, time = 1 as B & time = 2 as C. By delivering pizza for A, C & B we get the minimum average wait time to be

$$(3 + 6 + 16) / 3 = 25 / 3 = 8.33$$