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Course → BSC. IT

Section → A

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Ques 1.

Ans → #include <stdio.h>

#include <ctype.h>

#include <limits.h>

#include <math.h>

#include <stdbool.h>

#include <stddef.h>

#include <stdin.h>

#include <stdlib.h>

#include <string.h>

char* readline();

char* ltrim(char*);

char* rtrim(char*);

int parse-int(char*);

int main()

{ File* fptr = fopen("Output-Path", "w");

int n = parse-int(ltrim(rtrim(readline())));

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 (strtok(readline),

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

{ int customers_item = parse-int(* (customers_item-temp + j));

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$((customers + i) + j) = customers_item; \} \}$

(2)

int result = minimum Average(n, 2, customers);

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

fclose(fptr);

return 0;

}

char* readline () {

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; }

if (data_length < alloc_length - 1 // data[data_length - 1] =
= '\n')

{ break; }

alloc_length < 2 = 1;

data = realloc(data, alloc_length);

if (!data)

data = '\0';

break;

}

}

if (data[data_length - 1] == '\n') {

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

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else

{ data = realloc (data, data-length + 1);

if (!data)

{ data = '\0';

} else{

data[data-length] = '\0';

}

}

return data;

}

char* trim(char* str)

{ if (!str) {

return '\0';

}

if (!*str) {

return str;

}

while (*str != '\0' && isspace(*str)) {

str++;

}

return str;

}

char* rtrim(char* str) {

if (!str) {

return '\0';

}

if (!*str) {

return str;

}

char* ind = str + strlen(str) - 1;

while (ind >= str && isspace(*ind)) {

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end --; } 9

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

return str;

}

char** splits = NULL;

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

int spaces = 0;

while (token) {

splits = realloc (splits, size of (char*) * ++ spaces);

if (!splits) {

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;

}

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