AUDIA MAHARANI

2440045161 – LP01

**UAS ALGOPRO**

1. BMI SORTING MACHINE

#include<stdio.h>

//PAK MAAF SAYA BELUM SELESAI TAPI SAYA NGERTI MAKSUD CODENYA NGUBAH KE

// CM DULU, DI SORT BASE ON TINGGI, BARU NAMA.

struct Data{

int id;

char nama[255];

int foot;

int inch;

}d;

float count(int a, int b){

float cm;

cm = ((a\*12\*2.54)+(b\*2.54));

return cm;

}

void swap(int \*c, int \*d){

int temp = \*c;

\*c = \*d;

\*yd = temp;

}

void mergeSort(int l,int r){

int mid = (l+r)/2;

if(l != r){

mergeSort(l,mid);

mergeSort(mid+1,r);

}

int temp = l, j = mid+1, k = 0;

while(i <= mid && j <= r){

if(arr[i]<arr[j]){

arrb[k++] = arr[i++];

} else {

arrb[k++] = arr[j++];

}

}

while(i <= mid){

arrb[k++] = arr[i++];

}

while(j <= r){

arrb[k++] = arr[j++];

}

for(int l = 0; l < k; l++){

arr[l+l] = arrb[l];

}

return;

}

int main(){

struct Data d[5005];

int n, m;

int idx = 0;

int am[105];

scanf("%d", &n);

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

scanf("%[^,],%[^,],%d %d", &d[i].id, d[i].nama, &d[i].foot, &d[i].inch);

}

scanf("%d", &m);

for(int j = 0; j <= m; j++){

int arr[100];

scanf("%d",&m);

for(int j=1;j<=m;j++)

{

scanf("%d",&arr[j]);

}

for(int j = 1; j<=m; j++)

{

printf("Q%d:\n",j);

for(int i = 1;i<=n;i++)

{

float cm ;

cm = count(d[i].foot,d[i].inch);

mergeSort(0, n-1);

if (cm < arr[j])

{

printf("%d %s %.2f\n",d[i].id, d[i].nm, cm);

}else{

printf("-1\n");

break;

}

}

}

}

return 0;

}

1. RECORD FINDER (run error 80)

#include<stdio.h>

#include<string.h>

struct Record{

char acc[50];

char name[20];

int age;

double balance;

}r;

int main(){

struct Record r[5005];

int n, m;

char key[100];

scanf("%d", &n);

getchar();

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

scanf("%[^,],%[^,],%d,%f\n", r[i].acc, r[i].name, &r[i].age, &r[i].balance);

}

scanf("%d", &m);

getchar();

for(int i = 0; i < m; i++){

scanf("%s", key);

getchar();

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

if(strcmp(key, r[i].acc) == 0){

printf("%s %d %.2f\n", r[i].name, r[i].age, r[i].balance); // pak bagian ini ga ngeprint.

break;

}

if(i == n-1 && (strcmp(r[i].acc,key) != 0)){

printf("-1\n");

}

}

}

}

1. FINANCIAL AID (correct)

#include<stdio.h>

#include<string.h>

struct Data{

char type[10];

char nama[20];

int price;

}d;

int main(){

struct Data d[100];

FILE \*fp;

fp = fopen("tesdata.in", "r");

int n, count = 0, rec = 0;

char key[10];

fscanf(fp, "%d\n", &n);

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

fscanf(fp, "%[^,],%[^,],%d\n", d[i].type, d[i].nama, &d[i].price);

}

fscanf(fp,"%s", &key);

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

if(strcmp(key,d[i].type) == 0){

printf("%s %s %d\n", d[i].type, d[i].nama, d[i].price);

count++;

rec += d[i].price;

}

}

printf("Total Recipients: %d\n", count);

printf("Total Amount: %d\n", rec);

return 0;

}

1. BOOKLET PRINTING

#include<stdio.h>

#include<string.h>

// misalkan tc 14, buku 4 sisi, kalo cover depan ngadep muka, yang kiri 4 yang kanan 1.

// dan kalo dibuka, maka akan berurut 1,2,3,4.

// maka kalo ditotal dimodulus 4 maka habis, dan ada beberapa halaman yang yang tidak akan habis di modulo 4

//ada yang habis dibagi dan ada yang tidak

//patternya 1 2 blank.

//front idx ke 1 belakang + idx + 1 selalu berurut begitu

int main() {

int n;

scanf("%d", &n);

int blank = n % 4;

int depan, belakang, ctr = 0;

for(int i=1; i<=n/4; i++) {

ctr++;

if(ctr == 1) {

if(blank == 1) {

printf("Sheet %d, depan: Blank, 1");

printf("Sheet %d, belakang: Blank, Blank");

}

else if(blank == 2) {

printf("Sheet %d, depan: Blank, 1");

printf("Sheet %d, belakang: 2, Blank");

}

else if(blank == 3) {

printf("Sheet %d, depan: Blank, 1");

printf("Sheet %d, belakang: Blank, Blank");

}

else if(blank == 0) {

printf("Sheet %d, depan: %d, 1", n);

printf("Sheet %d, belakang: 2, %d", n-1);

}

}

else {

// maaf pak belum selesai

}

}

return 0;

}