Question1)

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#include <stdio.h>

struct friends

{

char name[20];

char pet[20];

int pn; //phone number

};

struct type

{

char tof[20];//type of friend

char nocf[20];//Name of common friends

char pvt[20];//places visited together

};

void main()

{ int n;

printf("\nEnter the number of friends:");

scanf("%d",&n);

struct friends fnd[n];//friend

struct type tp[n];//type

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

{

printf("\nEnter Friend name:");

scanf("%s",&fnd[i].name);

printf("\nEnter Pet name:");

scanf("%s",&fnd[i].pet);

printf("\nEnter phone number:");

scanf("%d",&fnd[i].pn);

printf("\nEnter the type of friend:");

scanf("%s",&tp[i].tof);

printf("\nEnter the Name of common friends:");

scanf("%s",&tp[i].nocf);

printf("\nEnter the places visited together:");

scanf("%s",&tp[i].pvt);

}

printf("\nFriends list");

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

{

printf("\n\nS.No:%d",i+1);

printf("\nName:%s",fnd[i].name);

printf("\nPet name:%s",fnd[i].pet);

printf("\nPhone number:%d",fnd[i].pn);

printf("\nType of friend:%s",tp[i].tof);

printf("\nName of common friends:%s",tp[i].nocf);

printf("\nPlaces visited together:%s",tp[i].pvt);

}

}

Question 2)

//Chandresh G.U RA2311003050021

#include<stdio.h>

#include <stdlib.h>

struct product

{

char name[50];

char Id[50];

float price;

};

int main()

{

struct product \*pdt;

int n;//Number of product

printf("\nEnter the number of product:");

scanf("%d",&n);

pdt = (struct product \*)malloc(n \* sizeof(struct product));

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

{

printf("\nEnter details of product %d",i+1);

printf("\n\nProduct Name:");

scanf("%s",&(pdt+i)->name);

printf("\nProduct Id:");

scanf("%s",&(pdt+i)->Id);

printf("\nPrice:");

scanf("%f",&(pdt+i)->price);

}

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

{

printf("\n\nProduct details:");

printf("\nProduct Name:%s,\nProduct ID:%s,\nProduct price:%f",(pdt+i)->name,(pdt+i)->Id,(pdt+i)->price);

}

float totalCost = 0;

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

{

totalCost += (pdt + i)->price;

}

printf("\n\nTotal cost for all products: %f\n", totalCost);

float maxprice = pdt->price;

float minprice = pdt->price;

int maxi = 0, mini = 0; //maxi = maxindex

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

{

if ((pdt + i)->price > maxprice)

{

maxprice = (pdt + i)->price;

maxi = i;

}

if ((pdt + i)->price < minprice)

{

minprice = (pdt + i)->price;

mini = i;

}

}

printf("\n\nMost expensive product:\n");

printf("Name: %s, ID: %s, Price: %f\n", (pdt + maxi)->name, (pdt + maxi)->Id, maxprice);

printf("\nLeast expensive product:\n");

printf("Name: %s, ID: %s, Price: %f\n", (pdt + mini)->name, (pdt + mini)->Id, minprice);

free(pdt);

return 0;

}