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**Year of passing** **-** 2023

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**SHOPPING CART USING C LANGUAGE**

#include <stdio.h>

struct items {

char name[50];

float unitPrice;

int gst;

int quantity;

};

int main() {

struct items basket[4];

strcpy(basket[0].name, "Leather wallet");

basket[0].unitPrice = 1100;

basket[0].gst = 18;

basket[0].quantity = 1;

strcpy(basket[1].name, "Umbrella");

basket[1].unitPrice = 900;

basket[1].gst = 12;

basket[1].quantity = 4;

strcpy(basket[2].name, "Cigarette");

basket[2].unitPrice = 200;

basket[2].gst = 28;

basket[2].quantity = 3;

strcpy(basket[3].name, "Honey");

basket[3].unitPrice = 100;

basket[3].gst = 0;

basket[3].quantity = 2;

**// Problem 1: Identify the items with the maximum GST amount**

float maxGstAmount = 0;

int maxGstitemsIndex = 0;

for (int i = 0; i < 4; i++) {

float gstAmount = (basket[i].unitPrice \* basket[i].gst / 100) \* basket[i].quantity;

if (gstAmount > maxGstAmount) {

maxGstAmount = gstAmount;

maxGstitemsIndex = i;

}

}

printf("items with maximum GST amount: %s\n", basket[maxGstitemsIndex].name);

**// Problem 2: Calculate the total amount to be paid to the shopkeeper**

float totalAmount = 0;

for (int i = 0; i < 4; i++) {

float unitPrice = basket[i].unitPrice;

int quantity = basket[i].quantity;

if (unitPrice >= 500) {

unitPrice -= unitPrice \* 0.05; // Apply 5% discount for unit price >= 500

}

totalAmount += unitPrice \* quantity;

}

printf("Total amount to be paid to the shopkeeper: %.2f\n", totalAmount);

return 0;

}