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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;
}
```