**Sri Lanka Institute of Information Technology**

**B. Sc Degree in IT/ISE/CSN**

**Year 1 – Semester 1 – 2019 – Regular Intake**

**Introduction To Programming ( IT1010)**

**Online 1**

**Version A**

**Time : 1 hour**

“Pittugala Super City” gives discounts to their loyalty customers as follow:

|  |  |
| --- | --- |
| **Bill amount (Rs.)** | **Discount** |
| 10000.00 or more | 20% |
| Between 5000.00 and 9999.00 | 15% |
| Between 1000.00 and 4999.00 | 8% |
| Less than 1000.00 | 5% |

The following table provides you the details of items the customers can buy from the store.

|  |  |  |
| --- | --- | --- |
| **Item Number** | **Item name** | **Price (Rs.)** |
| 1 | Milo Packet (400g) | 360.00 |
| 2 | Surf Excel 1kg Packet | 330.00 |
| 3 | Sunflower oil 1L bottle | 630.00 |
| 4 | Ice cream 1L | 350.00 |

Write a C program to do the following.

1. Input customer type (Loyalty or not).

Are you a loyalty customer (Y/N)? Y

1. Input the item number and quantity purchased by customer.

Input the item number :

Input the quantity :

1. Determine the price of the item using the above table.
2. Calculate the total bill.

1. Write a loop to enter more items by asking the below question and calculate the bill until the user has no items to enter. A customer can buy maximum of 5 items.

Do you want to continue (Y/N)? N

1. Calculate the final amount by considering the discount based on the customer type and total bill.

Format the output into 2 decimal points.

Save your program as ITXXXXXXXX.c

Sample output is given below:

Are you a loyalty customer (Y/N)? Y

Input the item number: 1

Input the quantity: 3

Do you have any more items (Y/N)? Y

Input the item number: 2

Input the quantity: 2

Do you have any more items (Y/N)? N

Net amount is 1600.80

#include <stdio.h>

int main()

{

char cus, cont;

int itemNo, qty, count = 0;

float price, totPrice, finalAmt = 0, discount, discountedAmt;

printf("Are you a loyalty customer? (Y/N)");

scanf("%\*c%c", &cus);

do{

totPrice = 0;

printf("Input item no:");

scanf("%d", &itemNo);

printf("Input the quantity:");

scanf("%d", &qty);

switch(itemNo){

case 1: price = 360.00;

break;

case 2: price = 330.00;

break;

case 3: price = 630.00;

break;

case 4: price = 350.00;

break;

}

totPrice = price \* qty;

finalAmt += totPrice;

count++;

printf("Do you want to continue? (Y/N)");

scanf("%\*c%c", &cont);

}while(cont == 'Y' && count <= 5);

if(cus == 'Y'){

if(finalAmt > 10000)

discount = 0.20;

else if (finalAmt > 5000)

discount = 0.15;

else if(finalAmt > 1000)

discount = 0.08;

else

discount = 0.05;

}

else

discount = 0.0;

discountedAmt = finalAmt - finalAmt \* discount;

printf("Net amount is %.2f\n",discountedAmt );

return 0;

}