ITC Final Project
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Group Members:
Rohail Rathore
Mustan Ali

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Introduction to Computer Science(ITC)

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Bachelors in Computer Science

Supervisors:
Ms. Sadia Aziz
Mr Khali-ur-Rehman

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Cash Register System

The goal of the program is to assist the cashier in taking the customer's orders. The program will present the menu to the cashier. The cashier will be able to select the products by pressing the corresponding numbers on the menu list. When the order is complete, the computer will generate a bill that includes GST. The program then allows the cashier to enter the amount paid by the customer. The application will then compute the amount of the return and display it.

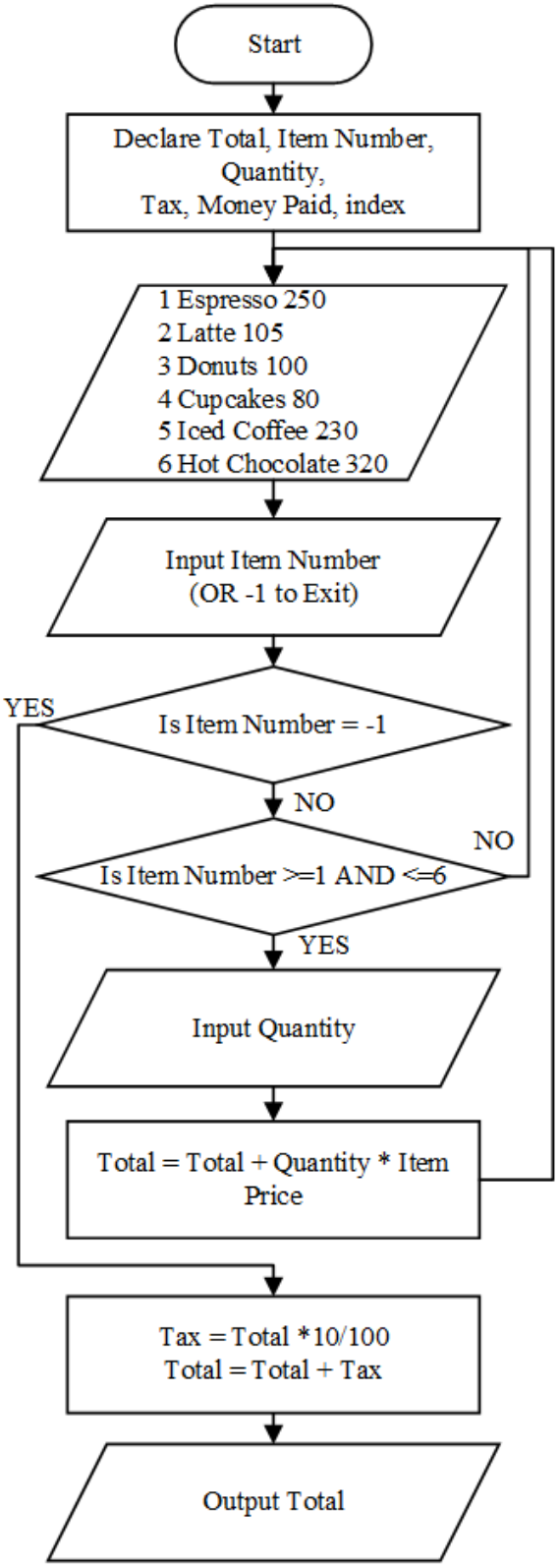
Table of Content

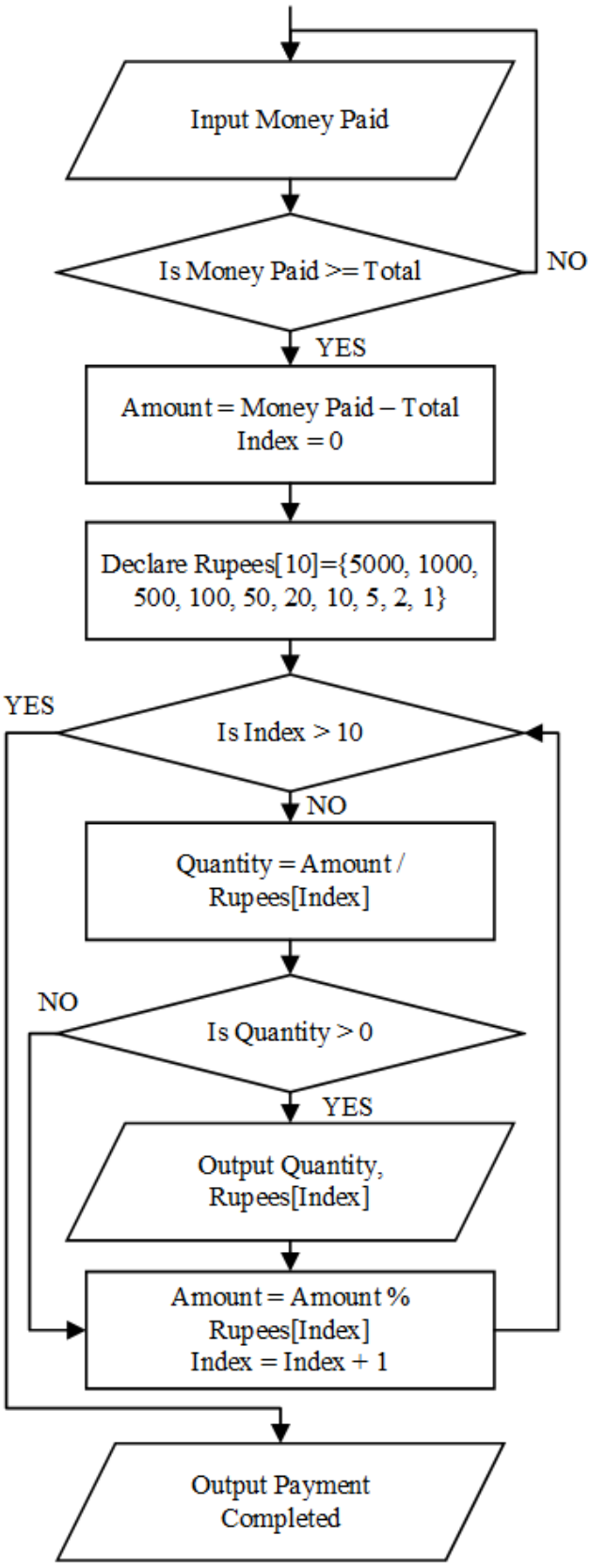
1. Introduction

This report is about the "Cash Register System" program. We have used the C language to code this program. The program is about making the whole process of taking orders and payment easy for the cashier. The program will present the menu to the cashier. The cashier will be able to select the products by pressing the corresponding numbers on the menu list. When the order is complete, the computer will generate a bill that includes GST. The program then allows the cashier to enter the amount paid by the customer. The application will then compute the amount of the return and display it.

2. Background

2.1 Flowchart




Input Money Paid
Is Money Paid >= Total
NO
YES
Amount = Money Paid – Total
Index = 0
Declare Rupees[10]={5000, 1000, 500, 100, 50, 20, 10, 5, 2, 1}
YES
Is Index > 10
NO
Quantity = Amount / Rupees[Index]
NO
Is Quantity > 0
YES
Output Quantity, Rupees[Index]
Amount = Amount % Rupees[Index]
Index = Index + 1
Output Payment Completed

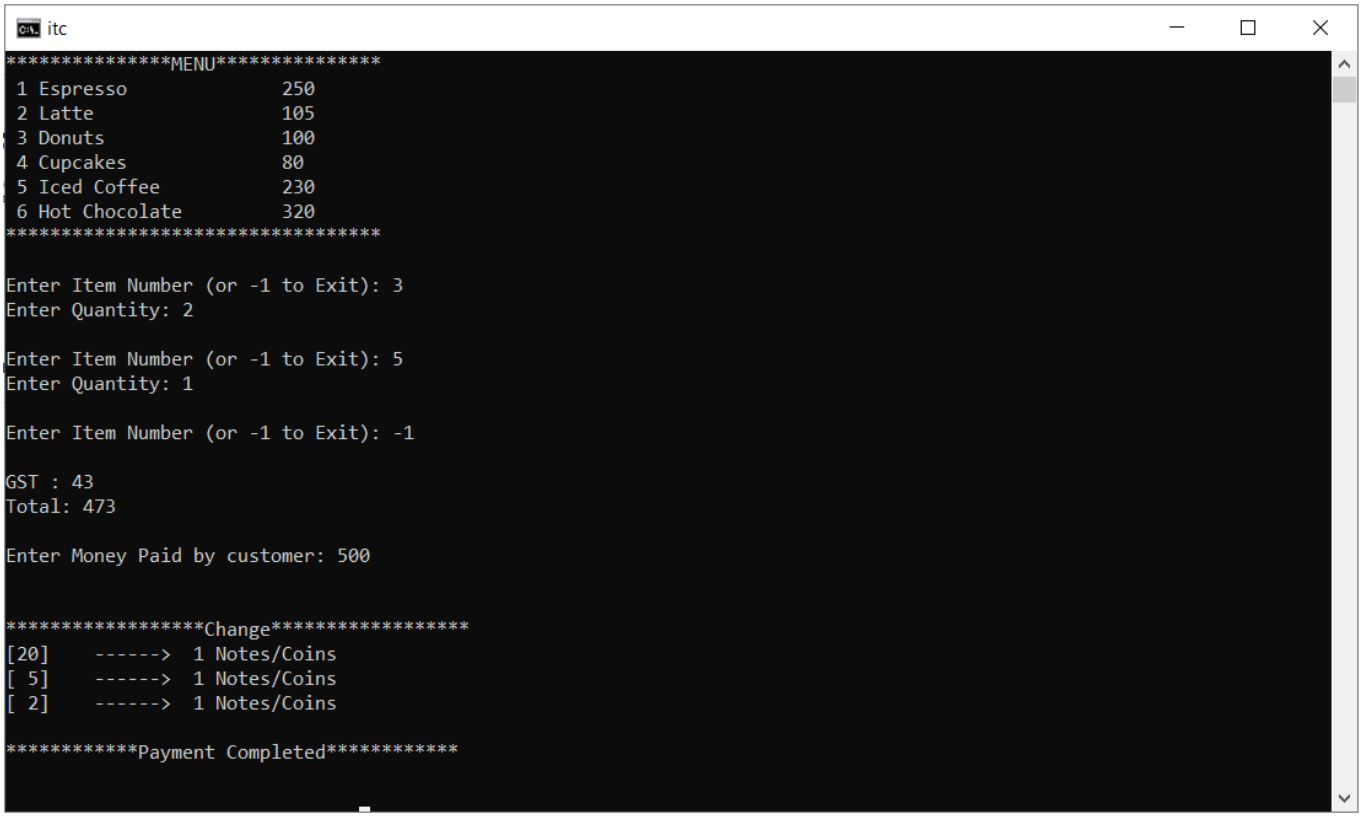
2.2 Code

```
#include <stdio.h>

int main()
{
   char i1[20]= {"Espresso"}, i2[20]= {"Latte"}, i3[20]= {"Donuts"}, i4[20]= {"Cupcakes"}, i5[20]= {"Iced
Coffee"},i6[20]= {"Hot Chocolate"};
   int price[6]= {250,105,100,80,230,320},itemnumber,ItemQuantity,total=0,tax=0,moneyPaid=0;

   printf("***************MENU***************\n");
   printf(" 1 %s \t\t %d\n",i1,price[0]);
   printf(" 2 %s \t\t %d\n",i2,price[1]);
   printf(" 3 %s \t\t %d\n",i3,price[2]);
   printf(" 4 %s \t\t %d\n",i4,price[3]);
   printf(" 5 %s \t\t %d\n",i5,price[4]);
   printf(" 6 %s \t %d\n",i6,price[5]);
   printf("************************************\n\n");

   printf("Enter Item Number (or -1 to Exit): "),scanf("%d",&itemnumber);

   while (itemnumber>=1 && itemnumber <=6)
   {
      if (itemnumber==1)
      {
         printf("Enter Quantity: "),scanf("%d",&ItemQuantity);
         total=total+ItemQuantity*price[itemnumber-1];
      }
      else if (itemnumber==2)
      {
         printf("Enter Quantity: "),scanf("%d",&ItemQuantity);
         total=total+ItemQuantity*price[itemnumber-1];
      }
      else if (itemnumber==3)
      {
         printf("Enter Quantity: "),scanf("%d",&ItemQuantity);
         total=total+ItemQuantity*price[itemnumber-1];
      }
      else if (itemnumber==4)
      {
         printf("Enter Quantity: "),scanf("%d",&ItemQuantity);
         total=total+ItemQuantity*price[itemnumber-1];
      }
```

```
        else if (itemnumber==5)
        {
            printf("Enter Quantity: "),scanf("%d",&ItemQuantity);
            total=total+ItemQuantity*price[itemnumber-1];
        }
        else if (itemnumber==6)
        {
            printf("Enter Quantity: "),scanf("%d",&ItemQuantity);
            total=total+ItemQuantity*price[itemnumber-1];
        }
        else if (itemnumber==7)
        {
            printf("Enter Quantity: "),scanf("%d",&ItemQuantity);
            total=total+ItemQuantity*price[itemnumber-1];
        }
        printf("\nEnter Item Number (or -1 to Exit): ");
        scanf("%d",&itemnumber);
    }

    tax=total*10/100;
    total+=tax;
    printf("\nGST : %d\n",tax);
    printf("Total: %d\n",total);

ReEnter:

    printf("\nEnter Money Paid by customer: "),scanf("%d",&moneyPaid);
    printf("\n");
    if(moneyPaid==total)
    {
        printf("\n************Payment Complete************\n");
    }

    else if(moneyPaid<total)
    {
        printf("\nEntered Amount is Less than Total plz Re-Enter");
        goto ReEnter;
    }

    else if(moneyPaid>total)
    {
        int rupees[10] = {5000, 1000, 500, 100, 50, 20, 10, 5, 2, 1};
        int index, amount, quantity;
```

```
        printf("\n*****************Change*****************\n");

        amount=moneyPaid-total;
        for(index=0; index<10; index++)
        {
            quantity = amount / rupees[index];
            if (quantity>0)
            {
                printf("[%2d] \t", rupees[index] );
                printf("------> %2d Notes/Coins\n", quantity);
            }
            amount = amount % rupees[index];
        }
        printf("\n************Payment Completed************\n");
    }

    return 0;
}
```

3. Working of Project



4. Scope of Project

This program can be used in many businesses such as restaurants, small shops, cafes, etc. The program is very easy to make and can be modified with buttons and GUI.

5. Conclusion

This program is helpful in many businesses. For example, in many restaurants, cashiers have to deal with a long line of customers. They have to take orders and remember them. With the help of this program, they can take orders fast, and the chances of error will be less.