```
279 packages can be upgraded. Run 'apt list --upgradable' to see them.
john@john-VirtualBox:~$ sudo apt install build-essential -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
build-essential is already the newest version (12.9ubuntu3).
0 upgraded, 0 newly installed, 0 to remove and 279 not upgraded.
john@john-VirtualBox:~$ nano cashier.c
john@john-VirtualBox:~$
```

D

GNU nano 6.2 cashier.c

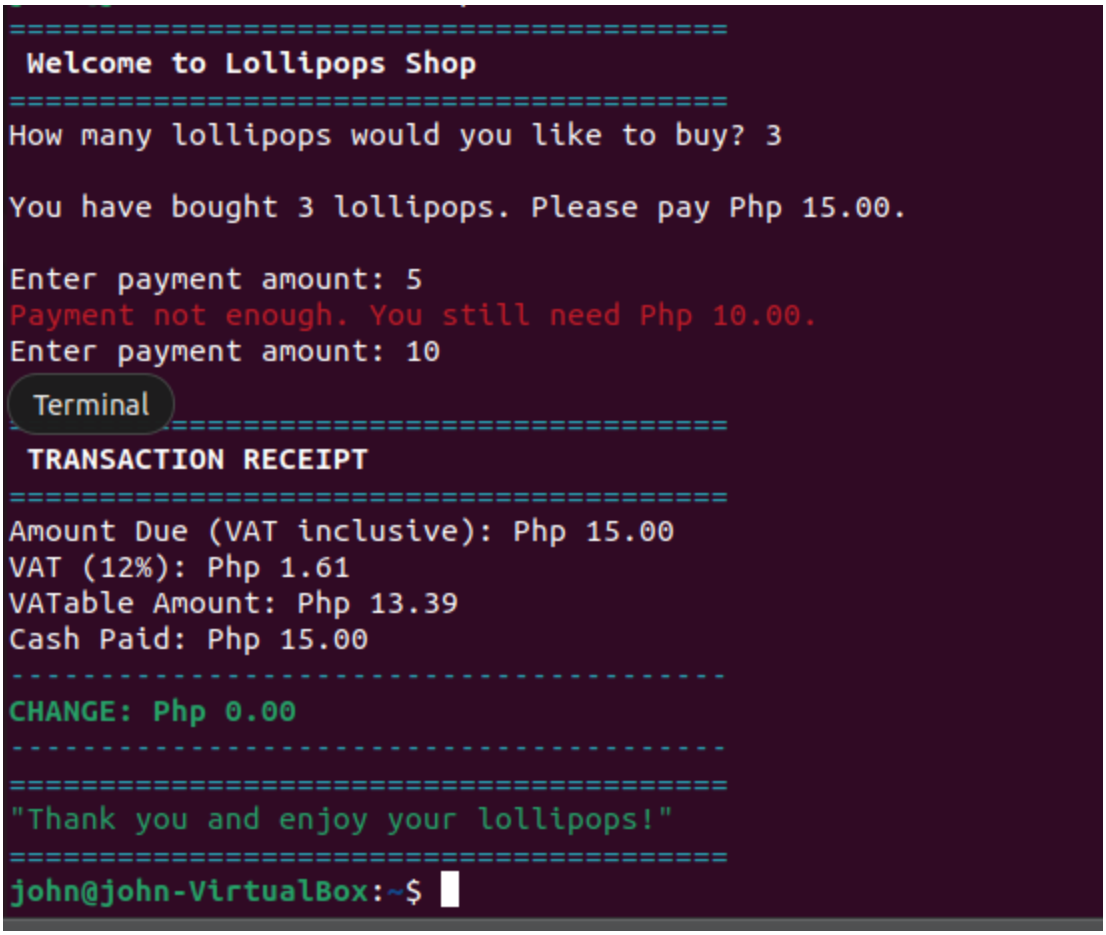
```c
#include <stdio.h>

#define RESET "\033[0m"
#define BOLD "\033[1m"
#define GREEN "\033[32m"
#define RED "\033[31m"
#define CYAN "\033[36m"

int main() {
    int quantity;
    float pricePerLollipop = 5.0;
    float totalAmountDue, cash = 0, totalPaid = 0, remaining, change;
    float vatable, vat;

    printf(CYAN "=======================================\n" RESET);
    printf(BOLD " Welcome to Lollipops Shop\n" RESET);
    printf(CYAN "=======================================\n" RESET);

    printf("How many lollipops would you like to buy? ");
    scanf("%d", &quantity);

    totalAmountDue = quantity * pricePerLollipop;

    printf("\nYou have bought %d lollipops. ", quantity);
    printf("Please pay Php %.2f.\n\n", totalAmountDue);

    while (totalPaid < totalAmountDue) {
        printf("Enter payment amount: ");
        scanf("%f", &cash);
        totalPaid += cash;

        if (totalPaid < totalAmountDue) {
            remaining = totalAmountDue - totalPaid;
            printf(RED "Payment not enough. You still need Php %.2f.\n" RESET, remaining);
        }
    }
```

```
john@john-VirtualBox:~$ gcc cashier.c -o cashier
john@john-VirtualBox:~$ ls -l
total 68
-rwxrwxr-x 1 john john 16064 Sep 16 01:10 cashier
-rw-rw-r-- 1 john john  2030 Sep 16 01:04 cashier.c
drwxr-xr-x 2 john john  4096 Sep  4 02:28 Desktop
drwxr-xr-x 2 john john  4096 Sep  4 02:28 Documents
drwxr-xr-x 2 john john  4096 Sep  4 02:28 Downloads
drwxr-xr-x 2 john john  4096 Sep 12 01:08 fork_wait_act
drwxr-xr-x 2 john john  4096 Sep  4 02:28 Music
drwxr-xr-x 3 john john  4096 Sep 13 05:41 Pictures
drwxrwxr-x 2 john john  4096 Sep 16 00:56 pipe_ipc_act
drwxr-xr-x 2 john john  4096 Sep  4 02:28 Public
drwx------ 4 john john  4096 Sep 12 00:54 snap
drwxr-xr-x 2 john john  4096 Sep  4 02:28 Templates
drwxrwxr-x 2 john john  4096 Sep  5 03:02 uox_lab
drwxr-xr-x 2 john john  4096 Sep  4 02:28 Videos
john@john-VirtualBox:~$ -rwxr-xr-x  1 user user  xxxx  Sep 16  cashier
-rwxr-xr-x: command not found
john@john-VirtualBox:~$ ls -l
total 68
-rwxrwxr-x 1 john john 16064 Sep 16 01:10 cashier
```

Terminal

```
-rwxrwxr-x 1 john john 16064 Sep 16 01:10 cashier
-rw-rw-r-- 1 john john  2030 Sep 16 01:04 cashier.c
drwxr-xr-x 2 john john  4096 Sep  4 02:28 Desktop
drwxr-xr-x 2 john john  4096 Sep  4 02:28 Documents
drwxr-xr-x 2 john john  4096 Sep  4 02:28 Downloads
drwxr-xr-x 2 john john  4096 Sep 12 01:08 fork_wait_act
drwxr-xr-x 2 john john  4096 Sep  4 02:28 Music
drwxr-xr-x 3 john john  4096 Sep 13 05:41 Pictures
drwxrwxr-x 2 john john  4096 Sep 16 00:56 pipe_ipc_act
drwxr-xr-x 2 john john  4096 Sep  4 02:28 Public
drwx------ 4 john john  4096 Sep 12 00:54 snap
drwxr-xr-x 2 john john  4096 Sep  4 02:28 Templates
drwxrwxr-x 2 john john  4096 Sep  5 03:02 uox_lab
drwxr-xr-x 2 john john  4096 Sep  4 02:28 Videos
john@john-VirtualBox:~$ ./cashier
```

LibreOffice Writer




I worked in a Linux virtual machine and used Ubuntu. I first opened the nano-editor and copied in the provided C code. I created cashier.c file and after saving it, I exited the editor. I used the command line gcc cashier.c -o cashier to compile the program, which created an executable file cashier. I checked the executable file by listing all the files in the directory using ls -l. I confirmed the program executed and generated the correct output by running the command ./cashier, entering sample inputs for quantity and payments, and receiving the change and receipt in the output. All the steps were documented in a word file, which was later converted to a PDF and submitted as part of the project.