



C- PROGRAMMING

MINI PROJECT

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ONLINE PHARMACY SYSTEM

DEPARTMENT OF SCIENCE & TECHNOLOGY

Introduction.

Medicine is any substance used in the treatment prevention of disease, diagnosis, relief of symptoms, or used to change the structure or function of the body. Taking medicine on time, as prescribed, is essential to making sure your body has an effective amount of the drug at all times. If not, this can cause the disease to develop a resistance to the medicine or simply prolong the amount of time it takes to feel better. Nowadays there is a crisis in medicine in SRILANKA So if a patient missed a dose of medicine, it can be a big challenge for them. So, our project mainly provides a user-friendly pill club. From this user can search for medicine, the availability of the medicine, and the price of the medicine all around the country. And they can get the medicines to their doorstep without any discomfort.

Scenario.

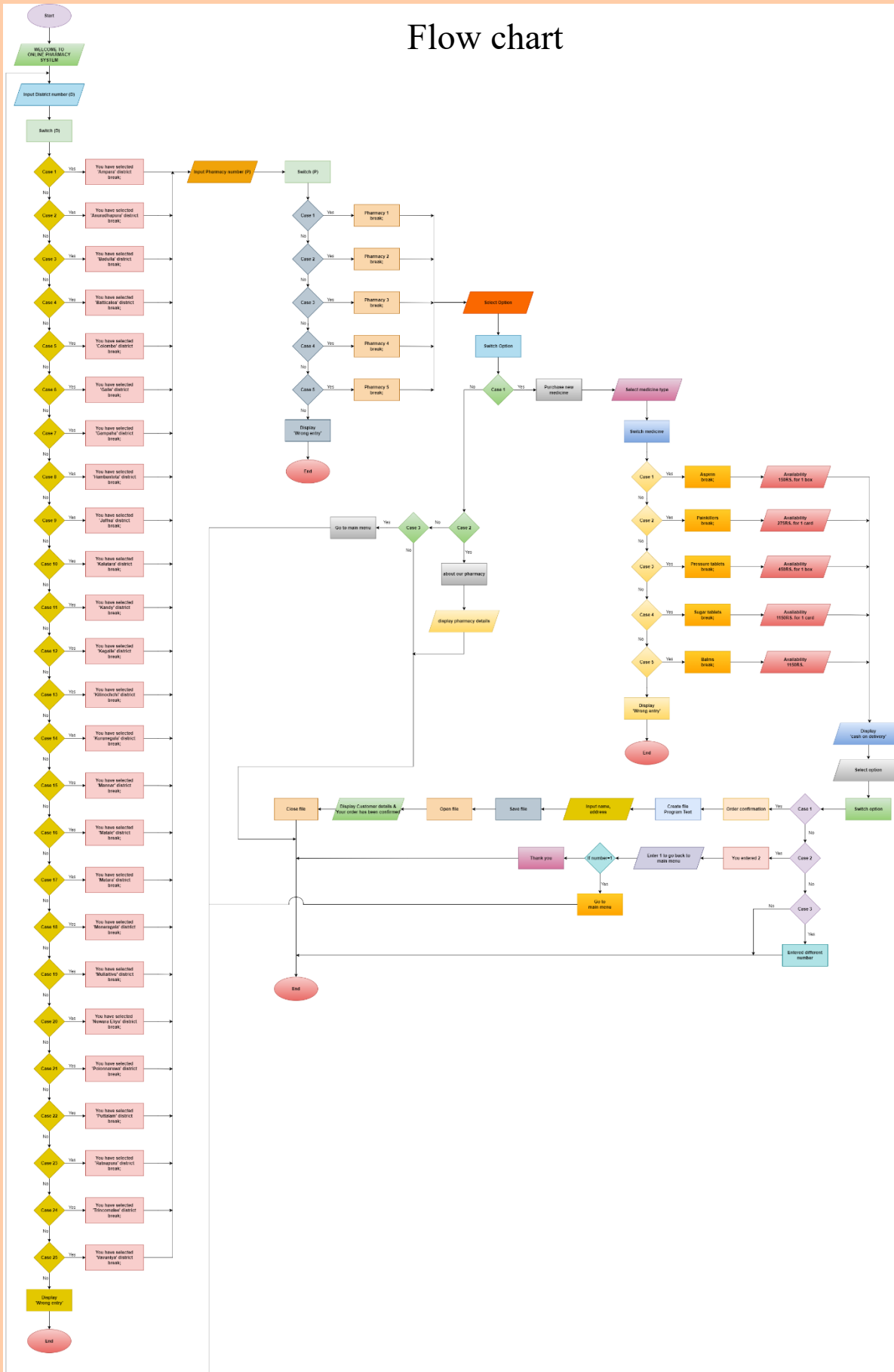
Srilanka's economic crisis becomes a health crisis as the country is unable to afford to import essential supplies and Sri Lanka runs out of medicine. Sri Lanka imports more than 80% of its medical supplies and now almost 200 medical items are in shortage including 76 essential, life-saving drugs, from blood-thinners for heart attack and stroke patients to antibiotics, rabies vaccines, and cancer chemotherapy drugs. And people are suffering due to the fuel crisis so sometimes people can't go and grab their medicine and if the medicine is not available it's an unwanted wander for them. If people want, they can refer to the NMRA web sites for medicine availability in Sri Lanka and from our pharmacy system they can know the drugs available in relevant pharmacies.

Solution.

So, this is the remedy for that problem. People can use this online pharmacy system to purchase their medicines. They can search from their district pharmacies through the online system, if relevant medicine is available at those pill clubs, they can confirm their orders and they can get to their doorsteps. If not, they can purchase from nearby provincial drugstores that have those medicines. customers can grab their medicines in a short time period from our online pharmacy system. So, this online pharmacy scheme minimizes health crises Whatever the crisis is in our country and patients don't want to miss their medicine because of this fuel crisis or medicine Scarcity in their areas.



Flow chart



PESUEDO CODE

BEGIN

Display “Welcome to online Pharmacy System”

Display “Enter any number”

Display “Input District number”

SWITCH (D)

Case 1

Display “Ampara”

Case 2

Display “Anuradapura”

Case 3

Display “Badulla”

Case 4

Display “Batticaloa”

Case 5

Display “Colombo”

Case 6

Display “Galle”

Case 7

Display “Gampaha”

Case 8

Display “Hambantot”

Case 9

Display “Jaffna”

Case 10

Display “Kalutara”

Case 11

Display “Kandy”

Case 12

Display “Kegalle”

Case 13

Display “Killinichchi”

Case 14

Display “Kurunegala”

Case 15

Display “Mannar”

Case 16

Display “Matale”

Case 17

Display “Matara”

Case 18
 Display “Monaragal”
Case 19
 Display “Mullaitivu”
Case20
 Display “Nuweraliya”
Case 21
 Display “Polonnaruwa”
Case 22
 Display “Puttalam”
Case 23
 Display “Ratnapura”
Case 24
 Display “Trincomalee”
Case 25
 Display “Vavuniya”
Default
 Display “Wrong Entry”

Display “Input Pharmacy number (P)”

SWITCH (P)

Case 1
 Display “Pharmacy 1”
Case 2
 Display “Pharmacy 2”
Case 3
 Display “Pharmacy 3”
Case 4
 Display “Pharmacy 4”
Case 5
 Display “Pharmacy 5”
Default
 Display “Wrong Entry”

Display “Input Option”

SWITCH

Case 1
 Display “Purchase new Medicine”

 Display “Select Medicine type”

 SWITCH Medicine

Case 1
 Display “Aspirin”
Case 2
 Display “Painkiller”
Case 3
 Display “Pressure Tablets”
Case 4
 Display “Sugar Tablets”
Case 5
 Display “Balms”
Default
 Display “Wrong Entry”

Display “Availability & Price”

Display “Cash on delivery”

Display “Do you like to confirm”

 If yes,

 Input your name & Home address

 Display “Your order successfully confirmed”

 Display “Thank You”

 Else

 Display “Enter number 1 to go back to main menu”

 Display “Thank You”

Case 2

 Display “About our Pharmacy”

 Display “Our Pharmacy established in 2015, 24 hours we are open you may
contact us at any time”

 Display “Enter any number to go back to input option”

Case 3

 Go to main menu

END

SOURCE CODE & OUTPUTS WITH DEMONSTRATION.

```

1 #include <stdio.h>
2 #include <stdlib.h>
3
4 struct customer_details{char address[1000];
5 char name[100];};
6
7 int main() {
8     int p, m, number;           // For the front page * designing
9     for(p=1;p<=12;p++) {
10         for(m=1;m<=p;m++) {
11             printf("*");
12         }
13         printf("\n");
14         printf("\t\t\t*****\n");
15         printf("\t\t\tWELCOME TO ONLINE PHARMACY SYSTEM\n");
16         printf("\t\t\t*****\n");
17         int x, y,e;
18
19         for(x=12;x>0;x--) {
20             for(y=x;y>0;y--) {
21                 printf("*");
22             }
23             printf("\n");
24         }
25         printf("-press any number to enter-");
26         scanf ("%d",&e);

```

[illegible]

as you can see this is our programs
starting it includes two header files

1.<stdio.h>-this header files includes basic input output operation that are needed to the program

In our program it includes,

- Main (), Printf (), scanf ()
- Tokens, variables
(keywords, identifiers, operators,)
- Structures
- conditional structures
(if, if else, if else if, switch)
- control structures
(for loop, goto keyword, break keyword)
- arrays
- functions
- pointers
- file handling
- error handling

2.<stdlib.h>-standard library, which includes functions for memory allocation, process control etc.....

As u can see the structure

Customer_details will be used for file handling.

When user starts our programme following output will be displayed, here we have used **for loop** to design our front page the * will be printing until it reaches 12 lines.

to continue user can easily press any number

to design our front page, used **variables** are

integers: m, p, x, y


```

30 mainmenu:          // (mainmenu)To select your district
31
32 printf("\t\t\t*****\n");
33 printf("\t\t\t*****\n");
34 printf("\t\t01.Ampara\n");
35 printf("\t\t02.Anuradhapura\n");
36 printf("\t\t03.Badulla\n");
37 printf("\t\t04.Batticaloa\n");
38 printf("\t\t05.Colombo\n");
39 printf("\t\t06.Galle\n");
40 printf("\t\t07.Gampaha\n");
41 printf("\t\t08.Hambantota\n");
42 printf("\t\t09.Jaffna\n");
43 printf("\t\t10.Kalutara\n");
44 printf("\t\t11.Kandy\n");
45 printf("\t\t12.Kegalle\n");
46 printf("\t\t13.Kilinochchi\n");
47 printf("\t\t14.Kurunegala\n");
48 printf("\t\t15.Mannar\n");
49 printf("\t\t16.Matale\n");
50 printf("\t\t17.Matara\n");
51 printf("\t\t18.Monaragala\n");
52 printf("\t\t19.Mullaitivu\n");
53 printf("\t\t20.Nuwara Eliya\n");
54 printf("\t\t21.Polonnaruwa\n");
55 printf("\t\t22.Puttalam\n");
56 printf("\t\t23.Ratnapura\n");
57 printf("\t\t24.Trincomalee\n");
58 printf("\t\t25.Vavuniya\n");
59
60 int district,pharmacy[250],service[25];
61 printf("\t\t\t*****\n");
62 printf("\t\t\tselect your district: ");
63 scanf("%d", &district);

```

```

*****
*****
01.Ampara
02.Anuradapura
03.Badulla
04.Batticaloa
05.colombo
06.Galle
07.Gampaha
08.Hambantot
09.Jaffna
10.Kalutara
11.Kandy
12.Kegalle
13.Killinochchi
14.Kurunegala
15.Mannar
16.Matale
17.Matara
18.Monaragal
19.Mullaitivu
20.Nuweraliya
21.Polonnaruwa
22.Puttalam
23.Ratnapura
24.Trincomalee
25.Vavuniya
*****
select your district:

```

This is our **mainmenu**

We have used **switch statement** here it includes 25 switch cases for each district.

User can choose the relevant district here by simply entering the district number

As We have **labeled** this part as **mainmenu**

goto keyword can **transfers** the execution to the label.

In our program mainly We have labeled 3 parts

1. **mainmenu**
(district selection part)
2. **mainmenu2**
(after you select any pharmacy from any district you will be directed to this part)
3. **area1**
(you can select wanted medicine type from this part)

Think a scenario that user selects ampara district from here by entering num 01

```

68 switch(district)
69 {
70     case 1: // case-01 for 1st district,listed pharmacy will show af
71
72     printf("\t\t\t You have selected Ampara district\n");
73     printf("\t\t\t<*****>\n\n\n");
74
75     printf("\t\t01.Royal pharmacy\n");
76     printf("\t\t02.Lanka pharmacy\n");
77     printf("\t\t03.City pharmacy\n");
78     printf("\t\t04.Dilani pharmacy\n");
79     printf("\t\t05.Ishara pharmacy\n\n\n");
80     printf("\t<***-----*****>\n");
81     printf("\t\tselect the pharmacy:");
82     scanf("%d", &pharmacy[1]); //we have t
83     system("cls");

```

user can see the listed pharmacy here.user can select the pharmacy by simply entering the relevant pharmacy number. We have used **switch statement** to select the pharmacy, it includes 5 switch cases for each pharmacy.

```

you have selected ampara distric
<*****>

01.royal pharmacy
02.lanka pharmacy
03.citypharmacy
04.dilani pharmacy
05.ishara pharmacy

<***-----*****>
select the pharmacy:

```

```

87
88 mainmenue2:
89
90     printf("\t\t01.purchase new medicine\n");
91     printf("\t\t02.about our pharmacy\n");
92     printf("\t\t03.go to main menu\n");
93     printf("select the service by entering (1/2) : ");
94     scanf("%d", &service[1]);
95     system("cls");

```

After selecting the pharmacy user can choose the service by entering relevant number We have used **switch statement** to select the service, it includes 3 switch cases for each service we have labeled this part as **mainmenue2**

```

01.purchase new medicine
02.about our pharmacy
03.go to main menu
select the service by entering (1/2) :

```

So, User will be directed to **mainmenue2** as soon as **selected any pharmacy** from **any district**

```

246 break;
247 case 2: //if
248 goto mainmenue2;
249 break;
250 case 3: //if
251 goto mainmenue2;
252 break;
253 case 4: //if
254 goto mainmenue2;
255 break;
256 case 5: //if
257 goto mainmenue2;
258 break;
259
260 default :
261 printf("Wrong entry! \n");

```

1. If user selects option 01- purchase new medicine

```
96 switch(service[1]){
97 case 1:
98     printf("\t\t***** \n");
99     printf("\t\tpurchase new medicine \n");
100    printf("\t\t***** \n\n");
101    int medname,select;
102
103
104    areal:
105        printf("\t\t1.ASPIRIN 2.PAINKILLERS 3.PRESSURE TABLETS 4.SUGAR TABLETS 5.BALMS\n\n");
106        printf("\t\t===== \n");
107
108    {
109        int q;
110        printf("\t\tSELECT medicine TYPE:");
111        scanf("%d", &q);
112        printf("\t\t===== \n\n");
```

Under the purchase new medicine user can select the wanted medicines simply entering the number

we managed to do this part with simple printf (), scanf () and conditional structures (if else if)

```
*****
purchase new medicine
*****
```

```
1.ASPIRIN 2.PAINKILLERS 3.PRESSURE TABLETS 4.SUGARTABLETS 5.BALMS
```

```
=====
SELECT medicine TYPE:
```

```

108     {
109         int q;
110         printf("\t\tSELECT medicine TYPE:");
111         scanf("%d", &q);
112         printf("\t\t===== \n\n\n");
113     printf("\t\t*****\n");
114
115     if(q==1)
116     printf("\t\t Your medicine is available TOTAL PRICE=150RS. for 1 box \n");//according to :
117     else if(q==2)
118     printf("\t\tYour medicine is available  TOTAL PRICE=275RS for 1 card. \n");
119     else if(q==3)
120     printf("\t\tYour medicine is available TOTAL PRICE=450RS.for 1 box  \n");
121     else if(q==4)
122     printf("\t\tYour medicine is available.TOTAL PRICE=1150RS.for one card  \n");
123     else if(q==5)
124     printf("\t\tYour medicine is available.TOTAL PRICE=1150RS.  \n");
125     else
126     printf("\t\t Medicine is NOT AVAILABLE \n");
127

```

integer: q -select medicine type number

according to users medicine preference the if else if will give the correct output

we have given all the outputs blow for every types of medicines.

```
*****
purchase new medicine
*****
```

```
1.ASPIRIN 2.PAINKILLERS 3.PRESSURE TABLETS 4.SUGARTABLETS 5.BALMS
```

```
=====
SELECT medicine TYPE:01
=====
```

```
*****
Your medicine is available TOTAL PRICE=150RS. for 1 box
*****
```

```
=====
SELECT medicine TYPE:02
=====
```

```
*****
Your medicine is available TOTAL PRICE=275RS for 1 card.
*****
```

```
=====
SELECT medicine TYPE:03
=====
```

```
*****
Your medicine is available TOTAL PRICE=450RS.for 1 box
*****
```

```
=====
SELECT medicine TYPE:04
=====
```

```
*****
Your medicine is available.TOTAL PRICE=1150RS.for one card
*****
```

```
=====
SELECT medicine TYPE:05
=====
```

```
*****
Your medicine is available.TOTAL PRICE=1150RS.
*****
```

```
=====
SELECT medicine TYPE:06
=====
```

```
*****
Medicine is NOT AVAILABLE
*****
```

As soon as selects the medicine type user can confirm his order by simply entering 1 or 2

Here we have used **switch** for taking multiple decision

If user

- Entered 01 (case 01- order confirmation part will be executed)
- Entered 02 (case 02- can go back to **mainmenu**)
- ✓ To do that we have used **If else conditional structure**– if user enter 01, he can go **to mainmenu** or program will be ended with thank you message.

As soon as selects the medicine type user can confirm his order by simply entering 1 or 2

Here we have used **switch** for taking multiple decision

If user

- Entered 01 (case 01- order confirmation part will be executed)
- Entered 02 (case 02- can go back to **mainmenu**)
- ✓ To do that we have used **If else conditional structure**– if user enter 01, he can go **to mainmenu** or program will be ended with thank you message.

As soon as selects the medicine type user can confirm his order by simply entering 1 or 2

Here we have used **switch** for taking multiple decision

If user

- Entered 01 (case 01- order confirmation part will be executed)
- Entered 02 (case 02- can go back to **mainmenu**)
- ✓ To do that we have used **If else conditional structure**– if user enter 01, he can go **to mainmenu** or program will be ended with thank you message.

- As soon as selects the medicine type user can confirm his order by simply entering 1 or 2
- Here we have used **switch** for taking multiple decision
- If user
- Entered 01 (case 01- order confirmation part will be executed)
 - Entered 02 (case 02- can go back to **mainmenu**)
 - ✓ To do that we have used **If else conditional structure**– if user enter 01, he can go **to mainmenu** or program will be ended with thank you message.

```

128     }
129     printf("\t\t*****\n\n");
130     printf("\t\t<payment method-cash on delivery>\n\n");
131     printf("\t\t*-**-**-*~**~**~**~**~**~**~**~**~**~**~**~**~ \n");
132
133
134     {
135         int select,z;
136
137
138         printf("\t\t Do you like to confirm your order(1.Yes/2.No):"); //you
139         scanf("%d",&select);
140         printf("\t\t*-**-**-*~**~**~**~**~**~**~**~**~**~**~**~**~ \n");
141         system("cls");
142         switch(select) {

```

```
<payment method-cash on delivery>
```

```
*_*_*_*_*_*_*_*_*_*_*_*_*_*_*_*_*_*_*_*_*_*_*_*_*_*_*_*_*_*_*_*_*_*_*_*_*_*_*_*_*_**
```

```
Do you like to confirm your order(1.Yes/2.No):
```

```
<payment method-cash on delivery>
```

```
*_*_*_*_*_*_*_*_*_*_*_*_*_*_*_*_*_*_*_*_*_*_*_*_*_*_*_*_*_*_*_*_*_*_*_*_*_*_*_*_*_**
```

```
Do you like to confirm your order(1.Yes/2.No):
```

when user enters 01 then order confirmation part will be executed

we managed to do this part with **file handling** in order to create a file pointer to work with that file next we open the file in **writing mode**.

Next user is asked to input his name & address which will be saved in **program.txt** file. If any **errors happened** in file handling **the error message will be displayed because of our error handling system** to do that we **used if conditional structure** as you can see the source code line 160-162.

```
142 switch(select){
143     case 1:
144         printf("\t\t\t*****\n");
145         printf("\t\t\t\tORDER CONFIRMATION\n");
146         printf("\t\t\t*****\n\n\n");
147
148         FILE *fptr; // creating file pointer to work with files
149         struct customer_details info;
150         fptr = fopen("program.txt", "w"); // opening file in writing mode
151
152
153
154         printf("ENTER YOUR NAME:\n");
155         scanf("%s", info.name1);
156
157         printf("ENTER YOUR DELIVERY ADDRESS:\n");
158         scanf("%s", info.address);
159
160         if (fptr == NULL) { // exiting program
161             printf("Error!");
162             exit(1);
163         }
164         fwrite(&info, sizeof(struct customer_details), 1, fptr);
165
166         fclose(fptr);
167
```

```
*****
ORDER CONFIRMATION
*****

ENTER YOUR NAME:
faheem
ENTER YOUR DELIVERY ADDRESS:
no 25,kaduruwala polonnaruwa
```

```

174 {
175     printf("***** \n\n");
176     printf("\t\tHello %s! your order successfully confirmed.\n", info.name1);
177     printf("***** \n\n");
178     printf("\t\tyour medicines will be delivered to %s----- \n\t\tvia our free delivery service thank you!\n", info.address);
179 }
180 fclose(fp1);
181

```

Once you input your name and addresses, conformation message will be displayed with thank you message! we have attached the output below.

```

*****
Hello faheem! your order successfully confirmed.
*****

your medicines will be delivered to no-----
via our free delivery service thank you!

Process returned 0 (0x0)   execution time : 163.814 s
Press any key to continue.

```


2. If u select option 02- ABOUT OUR PHARMACY-

```
87
88     mainmenue2:
89
90         printf("\t\t01.purchase new medicine\n");
91         printf("\t\t02.about our pharmacy\n");
92         printf("\t\t03.go to main menu\n");
93         printf("select the service by entering (1/2) : ");
94         scanf("%d", &service[1]);
95         system("cls");
```

```
212     case 2:                                     // case02 for 1st district-about our pharmacy
213
214         printf("\t\t***** \n");
215         printf("\t\tABOUT OUR PHARMACY \n");
216         printf("\t\t***** \n");
217         printf("Our pharmacy established in 2015,24 hours we are open you may contact us at any time.\n\n");
218         printf("\t\t***** \n");
219
220
221     {
222         int k;
223         printf("\t to go back press any number ");          //to go back to mainmenu (8th line )
224         scanf("%d", &k);
225         system("cls");
226         if(k>=0)
227             goto mainmenue2;
228         else
229             printf("Wrong entry! \n");
230         return 0;
231     }
232
```

Second option in **mainmenue2** is about our pharmacy as user select about pharmacy option following output will be displayed. And also, again user can goto mainmenue2 by entering any real number.to do this we **used if condition**.

```
*****
ABOUT OUR PHARMACY
*****
our pharmacy established in 2015,24 hours we are open you may contact us at any time.

*****
to go back press any num
```

Acknowledgment

t We express our special thanks of gratitude to our team members who put full effort for fabricate this project as well as our computer programming lecturer Mr. Nisal Nandasena who gave us this projecting chance to enhance our knowledge of the c language. Many things we have learned as a result of this project.

Thanks again to all who supported to build on this project.

Conclusion.

We design our project as an online pharmacy system. It is designed as taking users requirement and provide a result that what they searched for. We provide some essential services for users through our project. Those services are,

1. Pharmacies of a district
2. Search for medicine
3. Availableness of medicine
4. prices
5. And details of pharmacies

This online system not limited for their areas or districts. If a medicine is available at any pharmacy near to their province they can buy from there. Not only that, this online pharmacy system has many advantages, especially at this time of crisis. People can get their medicine without waiting or any discomfort. So, they don't want to think about fuel or medicine scarcity in their areas. And this system is very easy for sellers and customers as well