**COFFEE CODE  
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#include <stdio.h>  
#include <math.h>

**// Defining Constants //**

#define Esp\_CB 8 // grams //  
#define Esp\_Wat 30 // ml //

#define Cap\_CB 8  
#define Cap\_Wat 30  
#define Cap\_Milk 70 // ml //

#define Moc\_CB 8  
#define Moc\_Wat 39  
#define Moc\_Milk 160  
#define Moc\_CS 30 // ml //

**// Defining Low Threshold //**

#define CB\_LowT 16  
#define Wat\_LowT 45  
#define Milk\_LowT 200  
#define CS\_LowT 40

**// Defining Price //**

#define Esp\_Price 3.5 // AED //  
#define Cap\_Price 4.3  
#define Moc\_Price 5.5

**// Defining Admin Password //**

#define admin\_password “imanadmin”

**// Declaring and setting initial variables //**

double total\_amount = 0 // real-value answer hence double function //  
int beans\_avail = 100  
int water\_avail = 150  
int milk\_avail = 400

int chocolate\_avail = 60

char admin\_answer //answer is yes or no for the admin question //

double price

**// Menu Code //**

**int option**

printf(“Choose the option you want to execute\n”);  
printf(“1. Order a coffee\n”)  
printf(“2. Login into admin mode if you are an admin\n”)  
printf(“3. Cancel\n”) // Goes back to the main page //

scanf(“%d”,&option)

**char coffee**

if option == 1;  
printf(“The coffees available are: \n”)

if beans\_avail >= Esp\_CB && water\_avail >= Esp\_Wat;  
 printf(“A. Espresso for %.2f\n”, Esp\_Price)

elseif beans\_avail >= Cap\_CB && water\_avail >= Cap\_Wat && milk\_avail >= Cap\_milk  
 printf(“B. Cappuccino for %.2f\n, Cap\_Price)

elseif beans\_avail >= Moc\_CB && water\_avail >= Moc\_Wat && milk\_avail >= Moc\_Milk && chocolate\_avail >= Moc\_CS  
 printf(“C. Mocha for %.2f\n”, Moc\_Price)  
 else  
 printf(“Insufficient ingredients available”)

scanf(“%c”, &coffee)

**// Admin Mode //**

elseif option == 2  
printf(“Enter the admin password %12c\n”)  
scanf(“%c”, &admin\_answer)

if admin\_answer == admin\_password;  
 **(ENTERS ADMIN MODE)**  
 else  
 printf(“Invalid password please try again\n”)

elseif option == 3  
printf(“Thank you, see you again!”)

else  
printf(“Invalid answer, please enter numbers from 1-3 only”)