



UNIVERSITI TEKNOLOGI MARA

CSC128

Fundamentals of Computer Problem Solving

GROUP PROJECT REPORT

Title:

MOVIE TICKET BOOKING

Group Name:

TGV CS111 – 4B

Group Members:

Student ID	Name
2017210762	KHAIRUN NADHIRAH BINTI AMRAN
2017210616	NOOR AFZAN BINTI ZAIDI
2017210126	NURUL HAZLIN BINTI ZULKIFLI

Date Submitted :	1	2	0	6	2	0	1	9
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TABLE OF CONTENTS

ACKNOWLEDGEMENT	1
EXECUTIVE SUMMARY.....	2
PSEUDOCODE AND FLOWCHART.....	3 - 15
LIST OF CODES	16 - 22
DETAILS OF INPUT AND OUTPUT.....	23 - 32
SCREEN LAYOUT	33 - 34

ACKNOWLEDGEMENT

First of all, we would like to thank our lecturer, Sir Roger Canda for the guidance in finishing movie ticket booking project. We are really grateful for being able to complete the project within the time given. Thanks to our member for sharing their ideas and suggestions for this project. Besides that, the project will never be completed without the co-operation and effort from the members, Nurul Hazlin Zulkifli, Noor Afzan Zaidi and Khairun Nadhirah Amran. Lastly, we would like to extend our appreciation to all those who have made this project successfully.

EXECUTIVE SUMMARY

BOOKING ONLINE MOVIE TICKET

Nowadays many people love watching movie at the cinema. However, the process of buying ticket at the counter will take a long time since they need to queue to get ticket. Therefore, as a programmer we want to solve the problem of buying the ticket by using online system. Hence, we build a program to run the online system smoothly.

Our online system haves several steps. Firstly, the customers need to log in to our cinema website to choose cinema location. Secondly, customers choose the title, day and date. Next, choose seat that they want and food that we sell. Lastly, the total price will be shown and customer can make a payment using an online banking.

Place	1	2	3
	PALM MALL	SETIA CITY MALL	IOI CITY MALL

Title		2012	Aquaman	The Meg	The Nun	Rampage
Price	Adults	RM15.00	RM16.50	RM14.00	RM17.00	RM17.00
	Kids	RM8.50	RM9.00	RM7.00	RM10.00	RM12.00
	Student Discount (10%)	RM13.50	RM14.85	RM12.60	RM15.30	RM15.30
Food	Popcorn	RM18.30	RM18.30	RM18.30	RM18.30	RM18.30
	French Fries	RM12.50	RM12.50	RM12.50	RM12.50	RM12.50
	Nugget	RM10.00	RM10.00	RM10.00	RM10.00	RM10.00

PSEUDOCODE AND FLOWCHART

PSEUDOCODE

SIMPLE DESIGN

Function MAIN()

BEGIN

DO

CALL Greeting();

CALL Places();

CALL Titles();

CALL Dates();

CALL Times();

DO

CALL Food();

READ food_ans

WHILE food_ans == 'Y'

READ nextPlace

WHILE nextPlace == 'Y'

CALL Calculate Total();

CALL Receipt();

END

Function greeting()

BEGIN

WRITE ---Welcome to the newly cinema---

WRITE _____

WRITE Place:1 - Palm Mall.2 - Setia City Mall.3 - IOI City Mall.

READ place_code

WRITE Movie Title:1 - 2012.2 - Aquaman.3 - The Meg.4 - The Nun.5 - Rampage.

READ title_code

READ num_1

READ num_2

READ num_3

WRITE Date:1 - 8.4.2019 2 - 14.4.2019 3 - 23.4.2019 4 - 27.4.2019

READ date

```
WRITE Time:1 - 10.00 A.M 2 - 2.00 P.M 3 - 9.00 P.M 4 - 11.00 P.M
READ time
```

```
END
```

Function Places()

```
BEGIN
```

```
    IF(place_code == '1')
        WRITE Palm Mall
    ELSE IF(place_code == '2')
        WRITE Setia City Mall
    ELSE IF(place_code == '3')
        WRITE IOI City Mall
    ELSE
        WRITE Invalid
```

```
END
```

Function Titles()

```
BEGIN
```

```
    IF(title_code == '1')
        WRITE 2012
        price = (num_1 * 15.00) + (num_2 * 8.50) + (num_3 * 13.50)
        READ price

    ELSE IF(title_code == '2')
        WRITE Aquaman
        price = (num_1 * 16.50) + (num_2 * 9.00) + (num_3 * 14.85)
        READ price

    ELSE IF(title_code == '3')
        WRITE The Meg
        price = (num_1 * 14.00) + (num_2 * 7.00) + (num_3 * 12.60)
        READ price

    ELSE IF(title_code == '4')
        WRITE The Nun
        price = (num_1 * 17.00) + (num_2 * 10.00) + (num_3 * 15.30)
        READ price

    ELSE IF(title_code == '5')
        WRITE Rampage
        price = (num_1 * 17.00) + (num_2 * 12.00) + (num_3 * 15.30)
        READ price

    ELSE
        WRITE Invalid
```

END

Function Dates()

BEGIN

IF(date == '1')
WRITE 8.4.2019

ELSE IF(date == '2')
WRITE 14.4.2019

ELSE IF(date == '3')
WRITE 23.4.2019

ELSE IF(date == '4')
WRITE 27.4.2019

ELSE
WRITE Invalid

END

Function Times()

BEGIN

IF(time == '1')
WRITE 10.00 A.M

ELSE IF(time == '2')
WRITE 2.00 P.M

ELSE IF(time == '3')
WRITE 9.00 P.M

ELSE IF(time == '4')
WRITE 11.00 P.M

ELSE
WRITE Invalid

END

Function Food()

BEGIN

WRITE Food:1 - Popcorn.2 - French Fries.3 - Nugget.
READ food_code

```

    IF(food_code == '1')
        WRITE Popcorn
        foodPrice = 18.30
        READ foodPrice

    ELSE IF(food_code == '2')
        WRITE French Fries
        foodPrice = 12.50
        READ foodPrice

    ELSE IF(food_code == '3')
        WRITE Nugget
        foodPrice = 10.00
        READ foodPrice

    ELSE
        WRITE Invalid

    total_foodPrice += foodPrice
    READ total_foodPrice

END

```

Function Calculate Total()

```

BEGIN

    READ GST
    taxPrice = GST * price
    Read taxPrice
    taxFood = GST * total_foodPrice
    Read taxFood
    totalTax = taxPrice + taxFood
    Read totalTax
    total_price = price + totalTax + total_foodPrice
    Read total_price

END

```

Function Receipt()

```

BEGIN

    WRITE -----
    WRITE RECEIPT
    READ Place[20]
    READ Title[20]
    READ Date[20]
    READ Time[20]
    READ price

```

READ total_foodPrice

READ totalTax

READ total_price

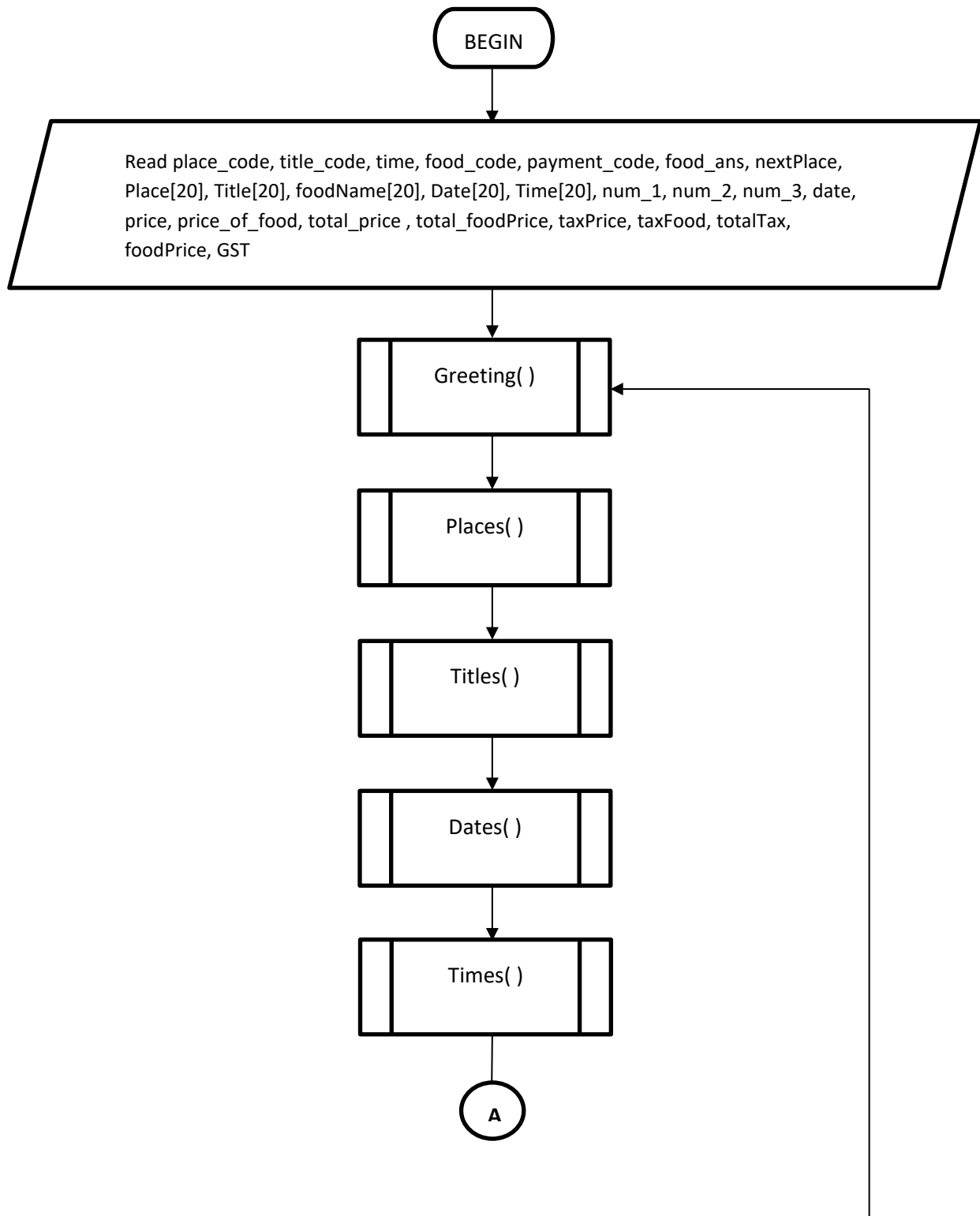
WRITE THANK YOU FOR BUYING MOVIE TICKET FROM US.HOPE YOU
ENJOY THE MOVIE.PLEASE COME AGAIN.

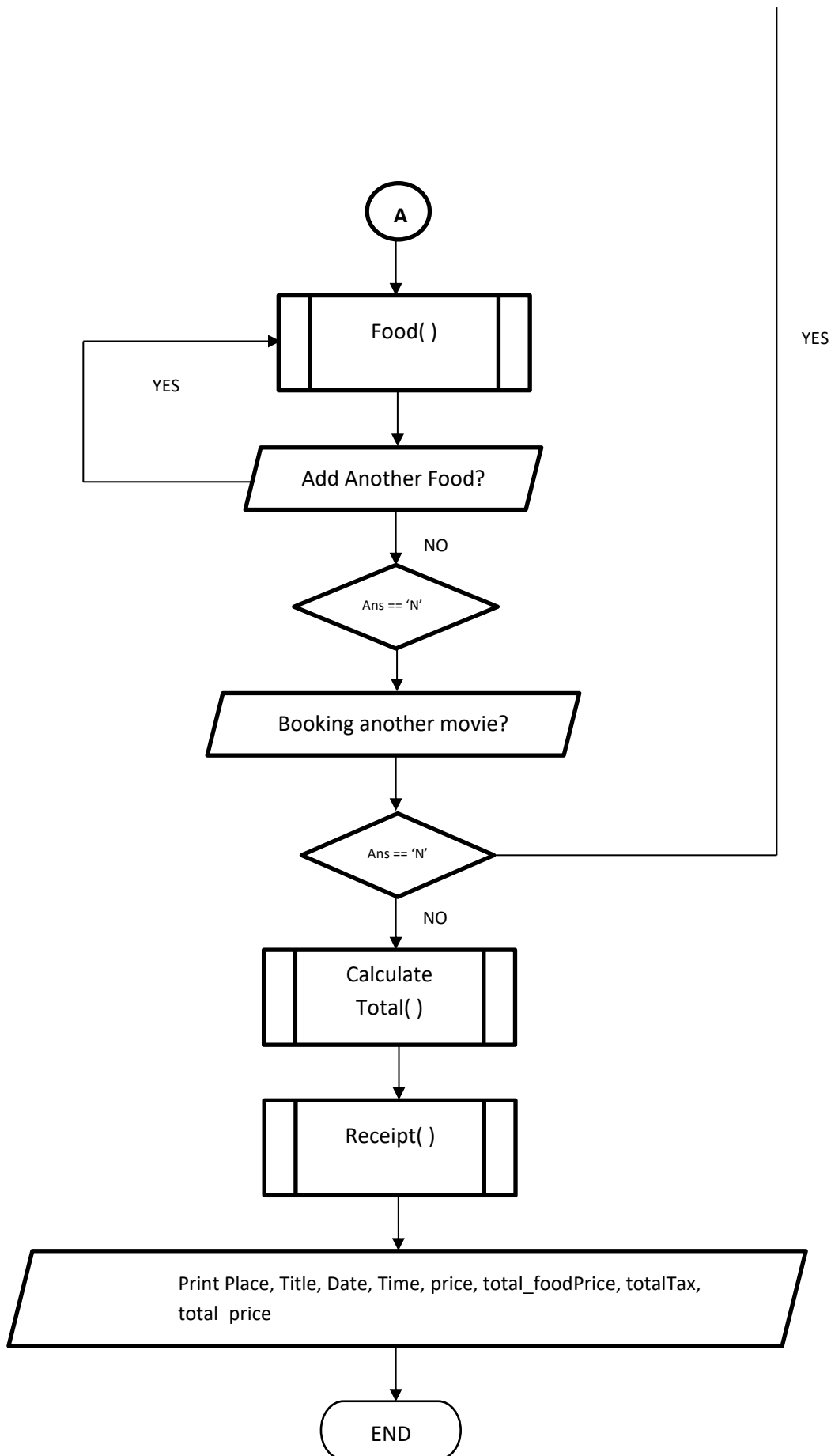
WRITE -----

END

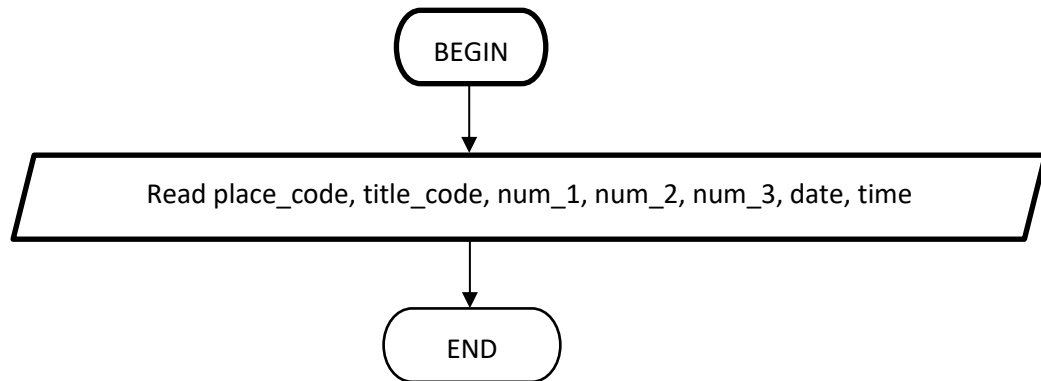
FLOWCHART

Function MAIN()

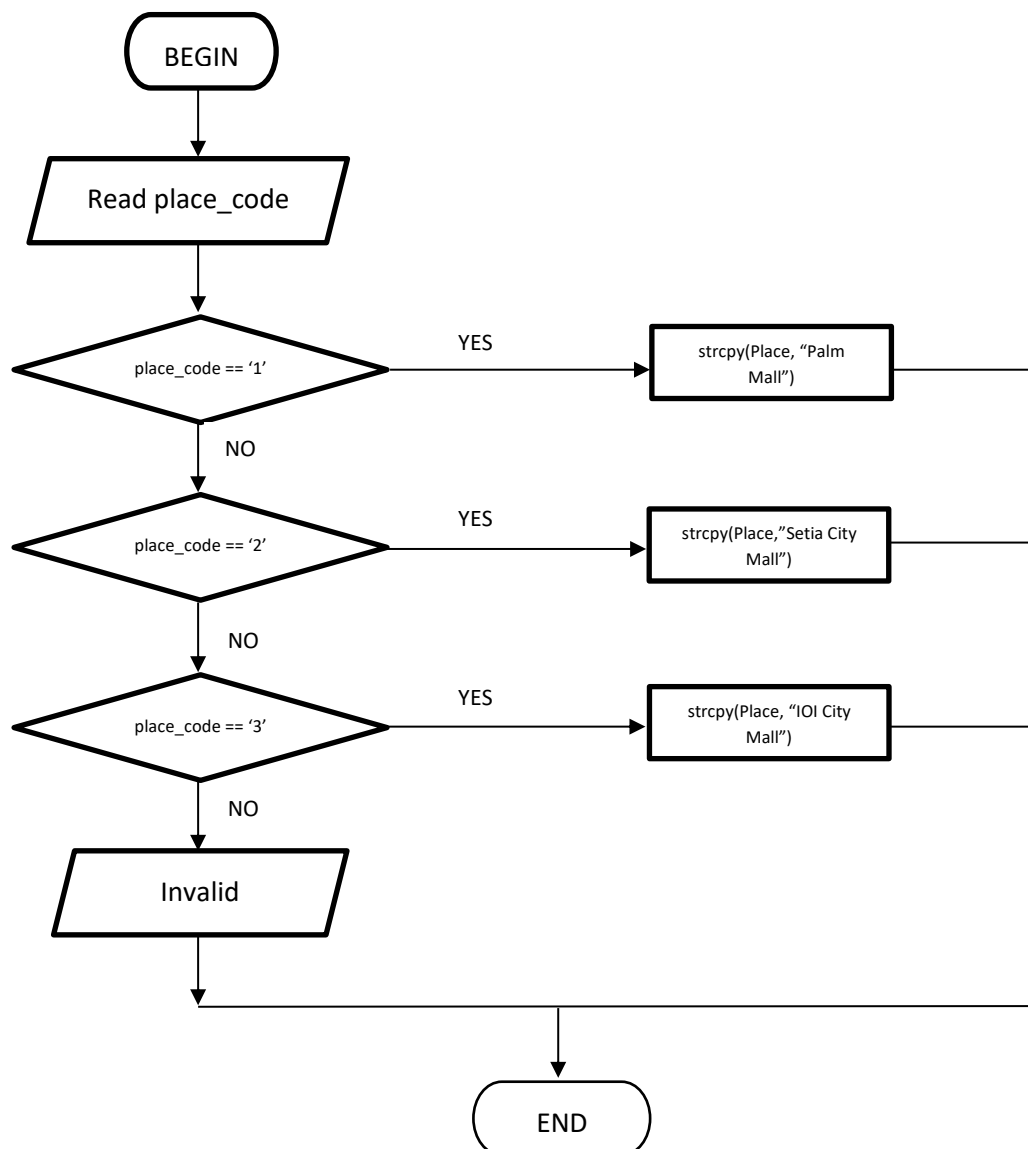




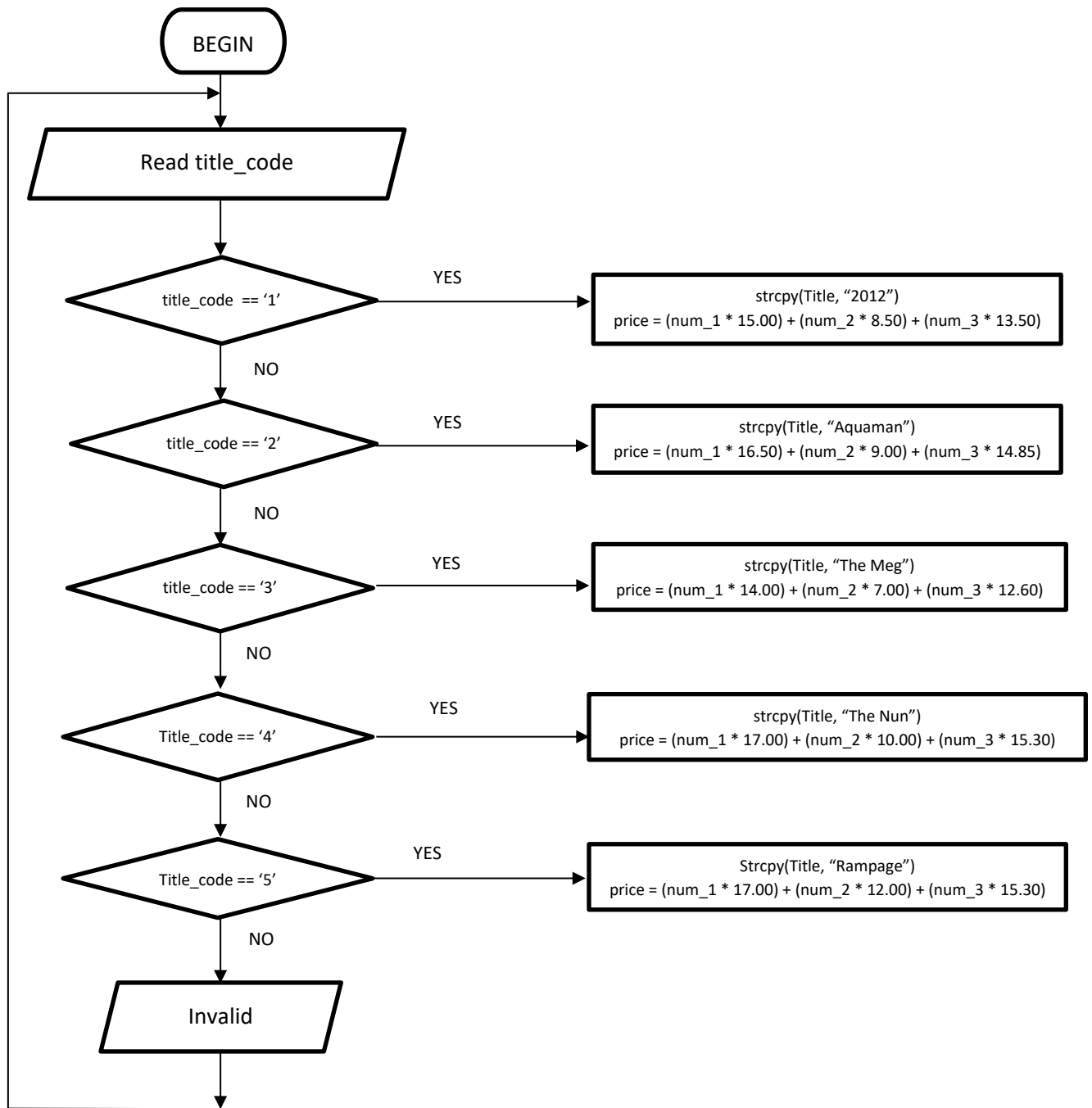
Function Greeting()



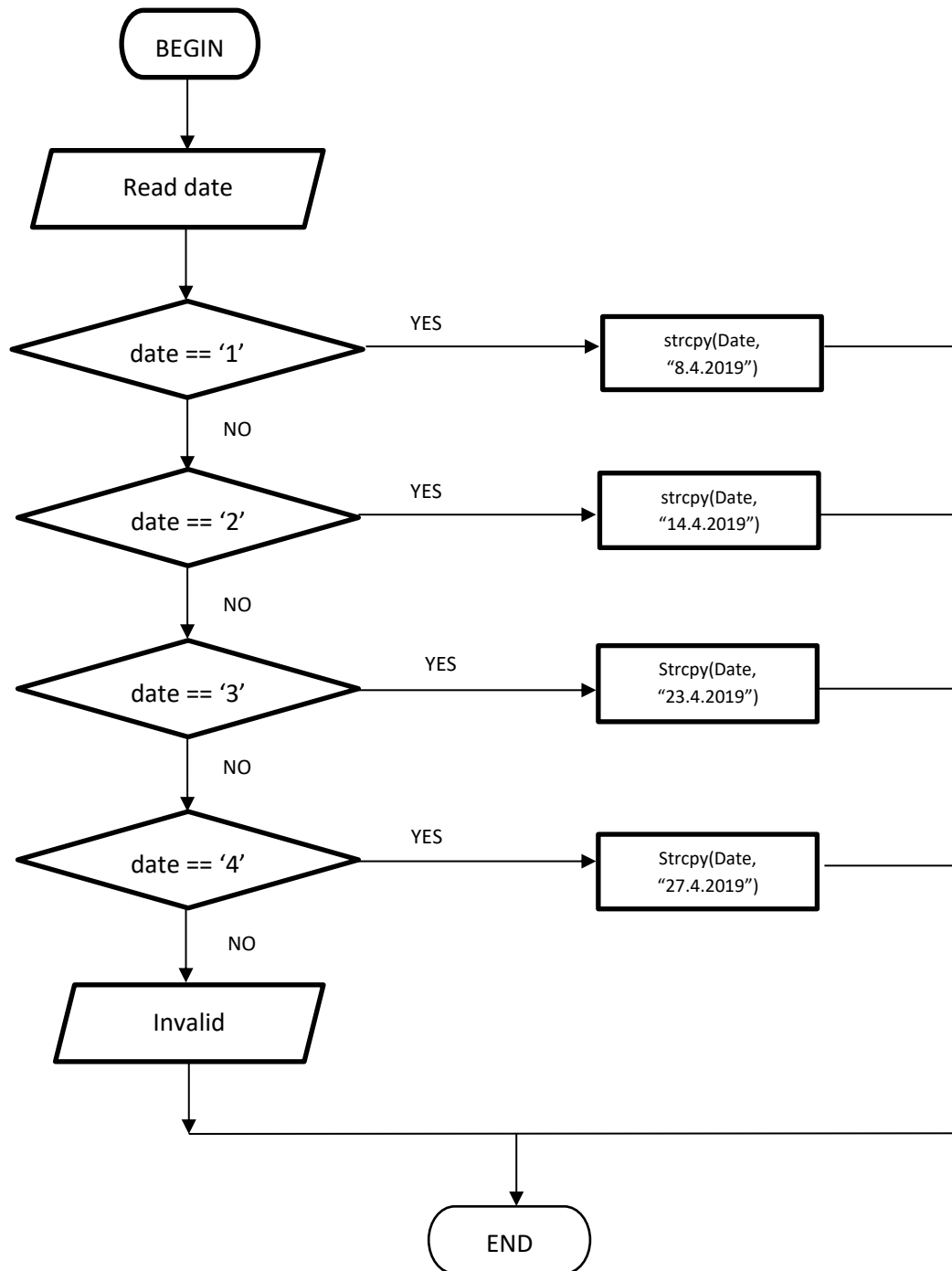
Function Places()



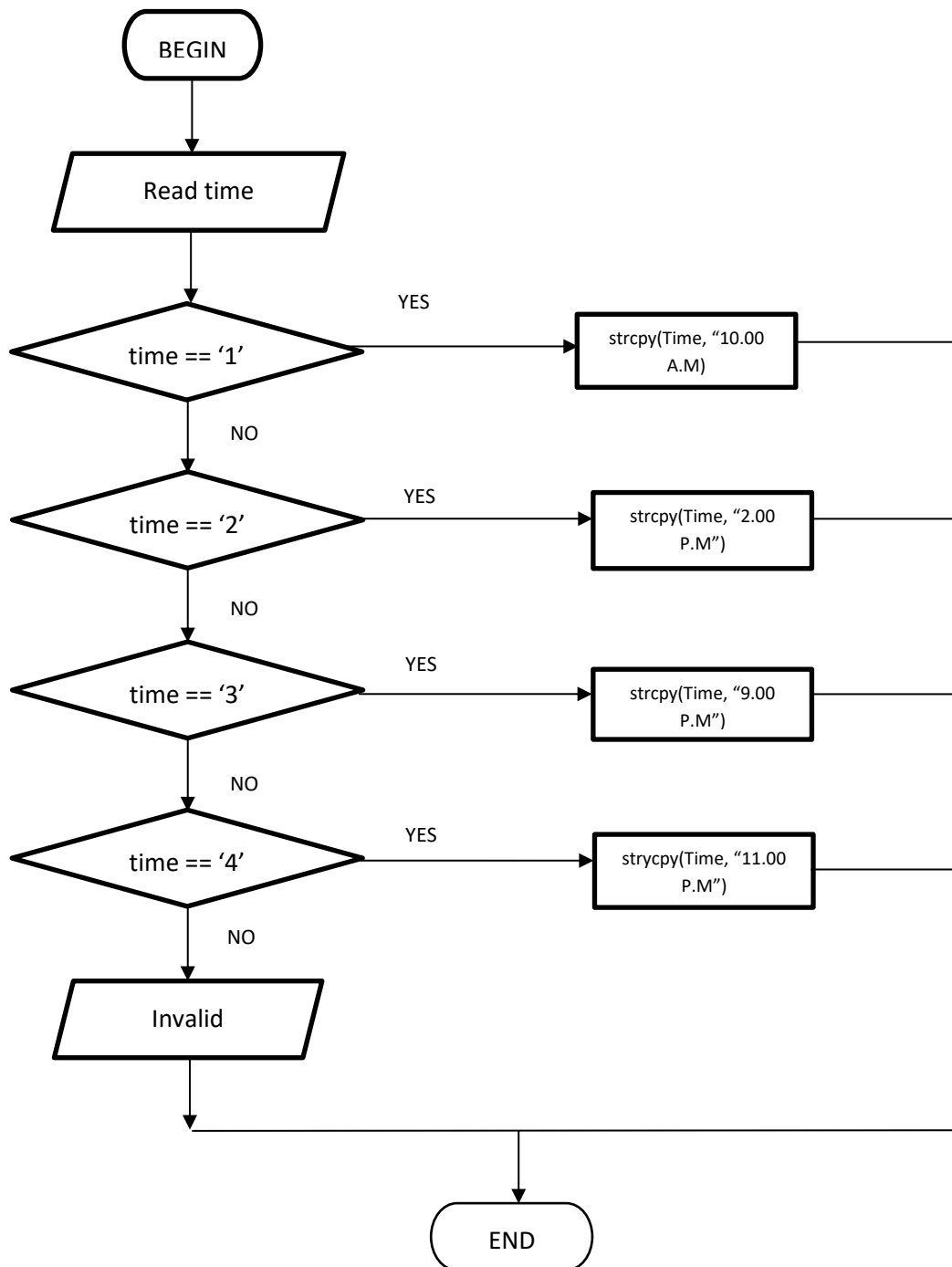
Function Titles()



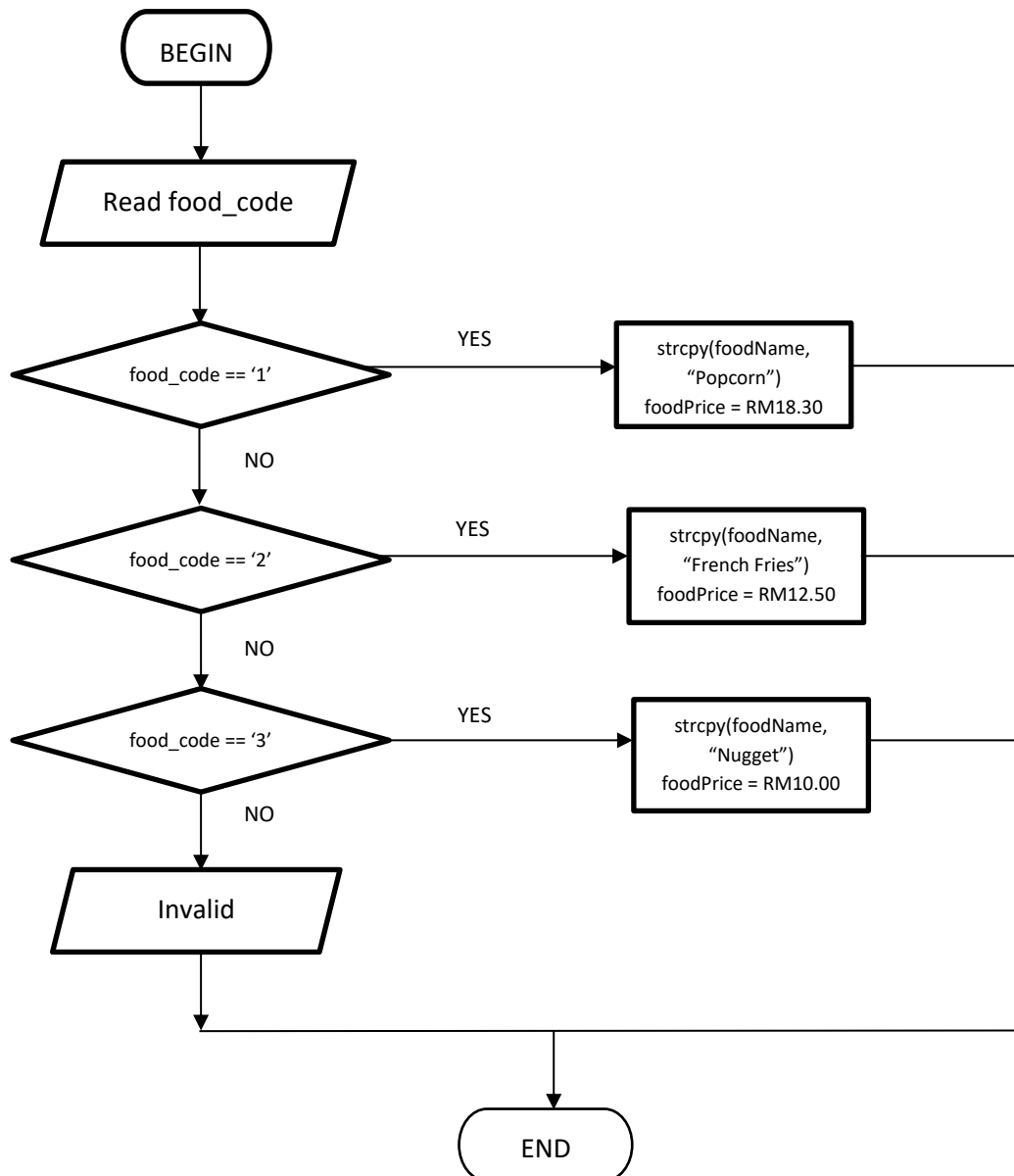
Function Dates()



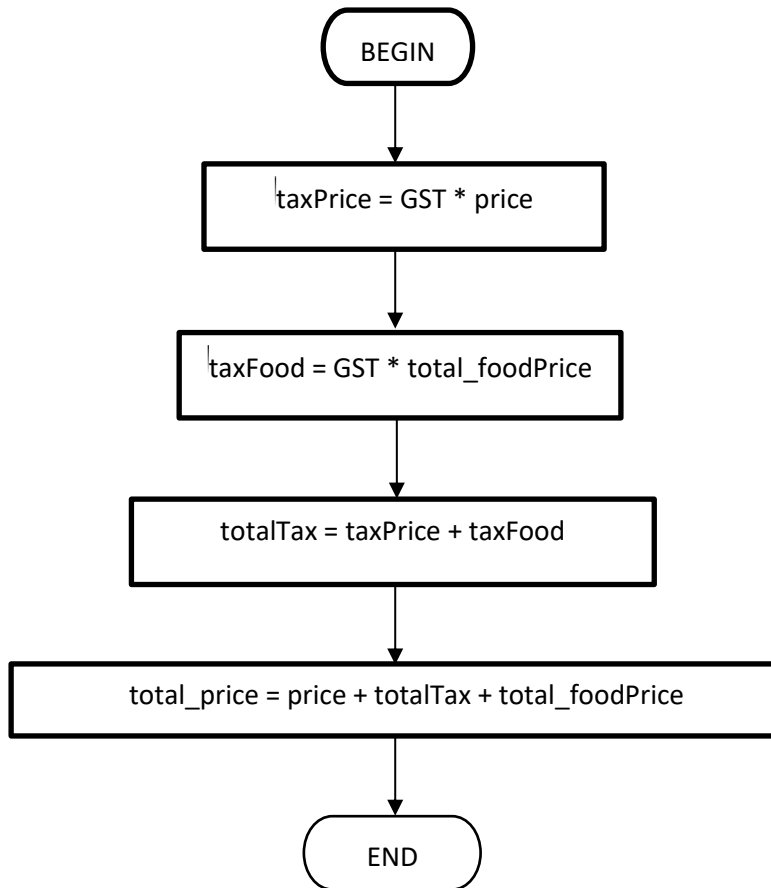
Function Times()



Function Food()



Function Calculate Total()



LIST OF CODES

void Greeting()

```
{  
  
    cout << "\t---Welcome to the newly cinema---";  
  
    cout << "\n_____";  
  
    cout << "\n\nPlace:\n1 - Palm Mall.\n2 - Setia City Mall.\n3 - IOI City Mall."<<endl;  
  
    cout << "\nChoose your place: ";  
  
    cin >> place_code;  
  
    cout << "\nMovie Title:\n1 - 2012.\n2 - Aquaman.\n3 - The Meg.\n4 - The Nun.\n5 - Rampage. " << endl;  
  
    cout << "\nPlease choose your movie: ";  
  
    cin >> title_code;  
  
    cout << "\nNumber of Adult(s): ";  
  
    cin >> num_1;  
  
    cout << "\nNumber of Kid(s): ";  
  
    cin >> num_2;  
  
    cout << "\nNumber of Student(s): ";  
  
    cin >> num_3;  
  
    cout << "\nDate:\n1 - 8.4.2019\n2 - 14.4.2019\n3 - 23.4.2019\n4 - 27.4.2019" <<endl;  
  
    cout << "\nPlease choose the date: ";  
  
    cin >> date;  
  
    cout << "\nTime:\n1 - 10.00 A.M\n2 - 2.00 P.M\n3 - 9.00 P.M\n4 - 11.00 P.M" << endl;  
  
    cout << "\nPlease choose the time: ";  
  
    cin >> time;  
  
}
```

void Places()

```
{  
    if(place_code == '1')  
        strcpy(Place, "Palm Mall");  
  
    else if(place_code == '2')  
        strcpy(Place, "Setia City Mall");  
  
    else if(place_code == '3')  
        strcpy(Place, "IOI City Mall");  
  
    else  
        cout << "Invalid";  
}
```

void Titles()

```
{  
    if(title_code == '1')  
    {  
        strcpy(Title, "2012");  
        price = (num_1 * 15.00) + (num_2 * 8.50) + (num_3 * 13.50);  
    }  
  
    else if(title_code == '2')  
    {  
        strcpy(Title, "Aquaman");  
        price = (num_1 * 16.50) + (num_2 * 9.00) + (num_3 * 14.85);  
    }  
}
```

```
}

else if(title_code == '3')
{
    strcpy(Title, "The Meg");
    price = (num_1 * 14.00) + (num_2 * 7.00) + (num_3 * 12.60);
}

else if(title_code == '4')
{
    strcpy(Title, "The Nun");
    price = (num_1 * 17.00) + (num_2 * 10.00) + (num_3 * 15.30);
}

else if(title_code == '5')
{
    strcpy(Title, "Rampage");
    price = (num_1 * 17.00) + (num_2 * 12.00) + (num_3 * 15.30);
}

else
    cout << "Invalid";
}
```

void Dates()

```
{  
    if(date == '1')  
        strcpy(Date, "8.4.2019");  
  
    else if(date == '2')  
        strcpy(Date, "14.4.2019");  
  
    else if(date == '3')  
        strcpy(Date, "23.4.2019");  
  
    else if(date == '4')  
        strcpy(Date, "27.4.2019");  
  
    else  
        cout << "Invalid";  
}
```

void Times()

```
{  
    if(time == '1')  
        strcpy(Time, "10.00 A.M");  
  
    else if(time == '2')  
        strcpy(Time, "2.00 P.M");  
  
    else if(time == '3')
```

```
        strcpy(Time, "9.00 P.M");

else if(time == '4')
        strcpy(Time, "11.00 P.M");

else
        cout << "Invalid";
}
```

void Food()

```
{

    cout << "\nFood:\n1 - Popcorn.\n2 - French Fries.\n3 - Nugget." << endl;
    cout << "\nPlease choose the food: ";
    cin >> food_code;

    if(food_code == '1')
    {
        strcpy(foodName, "Popcorn");
        foodPrice = 18.30;
    }

    else if(food_code == '2')
    {
        strcpy(foodName, "French Fries");
        foodPrice = 12.50;
    }
}
```

```
    else if(food_code == '3')
    {
        strcpy(foodName, "Nugget");
        foodPrice = 10.00;
    }

    else

        cout << "Invalid\n";

    total_foodPrice += foodPrice;
}
```

void CalculateTotal()

```
{
    taxPrice = GST * price;
    taxFood = GST * total_foodPrice;
    totalTax = taxPrice + taxFood;
    total_price = price + totalTax + total_foodPrice;
}
```

void Receipt()

```
{  
  
    cout << "-----" << endl;  
  
    cout<< "\t\t\tRECEIPT" << endl;  
  
    cout << "\nPlace: " << Place << endl;  
  
    cout << "Movie: " << Title << endl;  
  
    cout << "Date: " << Date << endl;  
  
    cout << "Time: " << Time << endl;  
  
    cout << "Ticket Price: " << price << endl;  
  
    cout << "Food Price: " << total_foodPrice << endl;  
  
    cout << "Total Tax: " << totalTax << endl;  
  
    cout << "Total Price: " << total_price << endl;  
  
    cout << "\nTHANK YOU FOR BUYING MOVIE TICKET FROM US.\nHOPE  
YOU ENJOY THE MOVIE.\nPLEASE COME AGAIN." << endl;  
  
    cout << "-----" << endl;  
  
}
```

DETAILS OF INPUT AND OUTPUT

OUTPUT	INPUT	PROCESS
<u>Output variable:</u> Place Title Date Time Ticket Price Food Price Total Tax Total Price	<u>Input variable:</u> place_code title_code time food_code payment_code food_ans nextPlace Place[20] Title[20] foodName[20] Date[20] Time[20] num_1 num_2 num_3 date price price_of_food total_price total_foodPrice taxPrice taxFood totalTax foodPrice <u>Constant:</u> GST = 0.06	<u>Processing items:</u> Place, Title, Date, Time, Ticket Price, Food Price, Total Tax, Total Price <u>Formula:</u> $\text{taxPrice} = \text{GST} * \text{price}$ $\text{taxFood} = \text{GST} * \text{total_foodPrice}$ $\text{totalTax} = \text{taxPrice} + \text{taxFood}$ $\text{total_price} = \text{price} + \text{totalTax} + \text{total_foodPrice}$ <u>Step / Solution algorithm:</u> 1. Get input 2. Calculate taxPrice 3. Calculate taxFood 4. Calculate totalTax 5. Calculate total_price 6. Display output

```
#include<iostream>
```

```
#include<string.h>
```

```
#include<ctype.h>
```

```
void Greeting();
```

```
void Places();
```

```
void Titles();
```

```
void Dates();
```

```
void Times();
```

```
void Food();
```

```
void CalculateTotal();
```

```
void Receipt();
```

```
using namespace std;
```

```
char place_code, title_code, time, food_code, payment_code, food_ans, nextPlace,  
Place[20], Title[20], foodName[20], Date[20], Time[20], date;
```

```
int num_1, num_2, num_3;
```

```
double price, price_of_food, total_price, total_foodPrice, taxPrice, taxFood, totalTax,  
foodPrice;
```

```
const double GST = 0.06;
```

```
int main()
```

```
{
```

```
do
```

```
{
```

```
    Greeting();
```

```
    Places();
```

```
    Titles();
```

```
Dates();
```

```
Times();
```

```
do
```

```
{
```

```
    Food();
```

```
    cout << "\nDo You Want To Choose Another Food?";
```

```
    cin >> food_ans;
```

```
}while(toupper(food_ans == 'Y'));
```

```
cout << "\nDo You Want To Choose Another Movie?";
```

```
cin >> nextPlace;
```

```
}while(toupper(nextPlace == 'Y'));
```

```
CalculateTotal();
```

```
system("cls");
```

```
Receipt();
```

```
return 0;
```

```
}
```

```
void Greeting()
```

```

{

    cout << "\t---Welcome to the newly cinema---";

    cout << "\n_____";

    cout << "\n\nPlace:\n1 - Palm Mall.\n2 - Setia City Mall.\n3 - IOI City Mall."<<endl;

    cout << "\nChoose your place: ";

    cin >> place_code;

    cout << "\nMovie Title:\n1 - 2012.\n2 - Aquaman.\n3 - The Meg.\n4 - The Nun.\n5 - Rampage. " << endl;

    cout << "\nPlease choose your movie: ";

    cin >> title_code;

    cout << "\nNumber of Adult(s): ";

    cin >> num_1;

    cout << "\nNumber of Kid(s): ";

    cin >> num_2;

    cout << "\nNumber of Student(s): ";

    cin >> num_3;

    cout << "\nDate:\n1 - 8.4.2019\n2 - 14.4.2019\n3 - 23.4.2019\n4 - 27.4.2019" <<endl;

    cout << "\nPlease choose the date: ";

    cin >> date;

    cout << "\nTime:\n1 - 10.00 A.M\n2 - 2.00 P.M\n3 - 9.00 P.M\n4 - 11.00 P.M" << endl;

    cout << "\nPlease choose the time: ";

    cin >> time;

}

```

```

void Places()

```

```

{

    if(place_code == '1')

```

```

        strcpy(Place, "Palm Mall");

else if(place_code == '2')
    strcpy(Place, "Setia City Mall");

else if(place_code == '3')
    strcpy(Place, "IOI City Mall");

else
    cout << "Invalid";
}

void Titles()
{
    if(title_code == '1')
    {
        strcpy(Title, "2012");
        price = (num_1 * 15.00) + (num_2 * 8.50) + (num_3 * 13.50);
    }

    else if(title_code == '2')
    {
        strcpy(Title, "Aquaman");
        price = (num_1 * 16.50) + (num_2 * 9.00) + (num_3 * 14.85);
    }

    else if(title_code == '3')

```

```

{
    strcpy(Title, "The Meg");
    price = (num_1 * 14.00) + (num_2 * 7.00) + (num_3 * 12.60);
}

else if(title_code == '4')
{
    strcpy(Title, "The Nun");
    price = (num_1 * 17.00) + (num_2 * 10.00) + (num_3 * 15.30);
}

else if(title_code == '5')
{
    strcpy(Title, "Rampage");
    price = (num_1 * 17.00) + (num_2 * 12.00) + (num_3 * 15.30);
}

else
    cout << "Invalid";
}

```

```

void Dates()

```

```

{
    if(date == '1')
        strcpy(Date, "8.4.2019");

    else if(date == '2')

```

```
        strcpy(Date, "14.4.2019");

    else if(date == '3')
        strcpy(Date, "23.4.2019");

    else if(date == '4')
        strcpy(Date, "27.4.2019");

    else
        cout << "Invalid";
}
```

```
void Times()
{
    if(time == '1')
        strcpy(Time, "10.00 A.M");

    else if(time == '2')
        strcpy(Time, "2.00 P.M");

    else if(time == '3')
        strcpy(Time, "9.00 P.M");

    else if(time == '4')
        strcpy(Time, "11.00 P.M");

    else
```

```
        cout << "Invalid";
    }
    void Food()
    {
        cout << "\nFood:\n1 - Popcorn.\n2 - French Fries.\n3 - Nugget." << endl;
        cout << "\nPlease choose the food: ";
        cin >> food_code;

        if(food_code == '1')
        {
            strcpy(foodName, "Popcorn");
            foodPrice = 18.30;
        }

        else if(food_code == '2')
        {
            strcpy(foodName, "French Fries");
            foodPrice = 12.50;
        }

        else if(food_code == '3')
        {
            strcpy(foodName, "Nugget");
            foodPrice = 10.00;
        }

        else
```

```

        cout << "Invalid\n";

        total_foodPrice += foodPrice;
    }

void CalculateTotal()
{
    taxPrice = GST * price;
    taxFood = GST * total_foodPrice;
    totalTax = taxPrice + taxFood;
    total_price = price + totalTax + total_foodPrice;
}

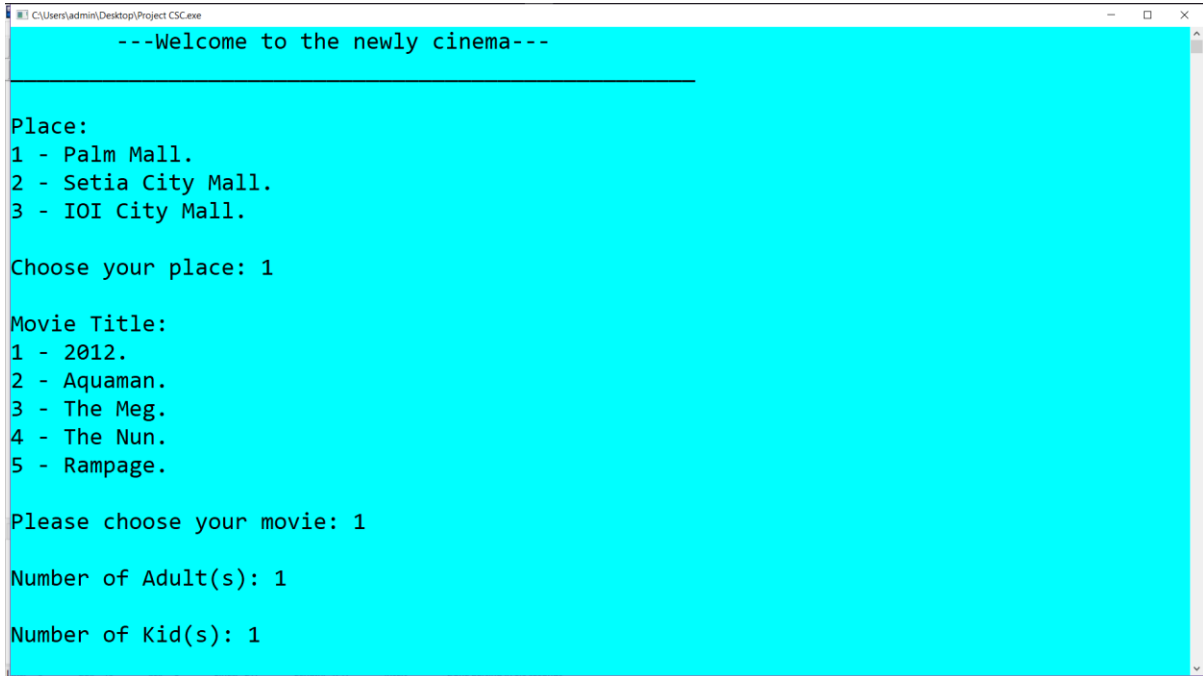
void Receipt()
{
    cout << "-----" << endl;
    cout<< "\t\t\tRECEIPT" << endl;
    cout << "\nPlace: " << Place << endl;
    cout << "Movie: " << Title << endl;
    cout << "Date: " << Date << endl;
    cout << "Time: " << Time << endl;
    cout << "Ticket Price: " << price << endl;
    cout << "Food Price: " << total_foodPrice << endl;
    cout << "Total Tax: " << totalTax << endl;
    cout << "Total Price: " << total_price << endl;

    cout << "\nTHANK YOU FOR BUYING MOVIE TICKET FROM US.\nHOPE
    YOU ENJOY THE MOVIE.\nPLEASE COME AGAIN." << endl;
}

```

```
cout << "-----" << endl;  
}
```

SCREEN LAYOUT



```
C:\Users\admin\Desktop\Project CSC.exe

---Welcome to the newly cinema---

Place:
1 - Palm Mall.
2 - Setia City Mall.
3 - IOI City Mall.

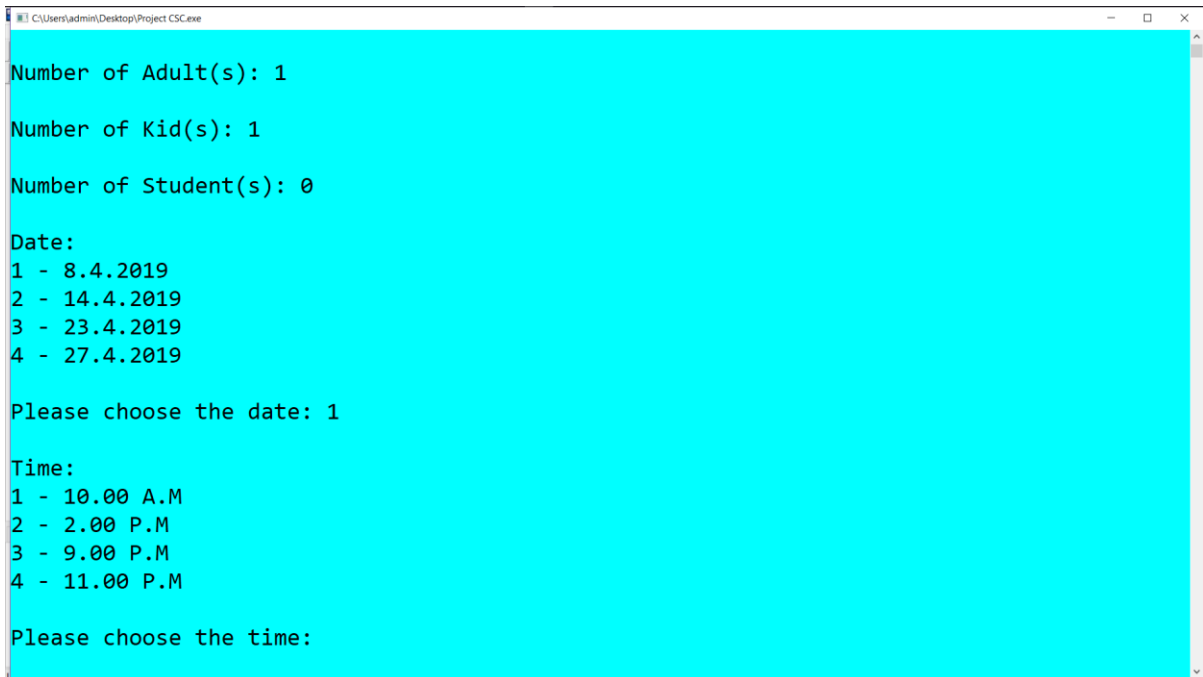
Choose your place: 1

Movie Title:
1 - 2012.
2 - Aquaman.
3 - The Meg.
4 - The Nun.
5 - Rampage.

Please choose your movie: 1

Number of Adult(s): 1

Number of Kid(s): 1
```



```
C:\Users\admin\Desktop\Project CSC.exe

Number of Adult(s): 1

Number of Kid(s): 1

Number of Student(s): 0

Date:
1 - 8.4.2019
2 - 14.4.2019
3 - 23.4.2019
4 - 27.4.2019

Please choose the date: 1

Time:
1 - 10.00 A.M
2 - 2.00 P.M
3 - 9.00 P.M
4 - 11.00 P.M

Please choose the time:
```

```
Select C:\Users\admin\Desktop\Project CSC.exe
Please choose the date: 1

Time:
1 - 10.00 A.M
2 - 2.00 P.M
3 - 9.00 P.M
4 - 11.00 P.M

Please choose the time: 1

Food:
1 - Popcorn.
2 - French Fries.
3 - Nugget.

Please choose the food: 1

Do You Want To Choose Another Food?
N

Do You Want To Choose Another Movie?
N
```

```
C:\Users\admin\Desktop\Project CSC.exe
-----
                        RECEIPT
-----

Place: Palm Mall
Movie: 2012
Date: 8.4.2019
Time: 10.00 A.M
Ticket Price: 23.5
Food Price: 18.3
Total Tax: 2.508
Total Price: 44.308

THANK YOU FOR BUYING MOVIE TICKET FROM US.
HOPE YOU ENJOY THE MOVIE.
PLEASE COME AGAIN.
-----

-----
Process exited after 158.6 seconds with return value 0
Press any key to continue . . .
```