

TRAIN RESERVATION SYSTEM

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CSE X2

```
#include <conio.h>

#include <math.h>

#include <stdio.h>

int main()
{
    int ta,tc,choice;

printf("#####\n");
    int c;
    printf("#####\n");
    printf("          \t\t\tWELCOME\n");
    printf("          \t\t\tTrain Reservation System\n");
    printf("          \t\t\t(NOTE: These rates are approved by IRCTC)\n");
    printf("          \t\t\tSTATION TO STATION          CHILDREN          ADULT\n");
    printf("          \t\t\t(Per Person)          (Per Person)\n");
    printf("          \t\t\tChennai-Banglore(route 1)          Rs.100          Rs.200\n");
    printf("          \t\t\tChennai-Vizag (route 2)          Rs.90          Rs.150\n");
    printf("          \t\t\tChennai-Hyderabad(route 3)          Rs.120          Rs.300\n");
    printf("          \t\t\tBanglore-Chennai(route 4)          Rs.100          Rs.200\n");
    printf("          \t\t\tVizag-Chennai (route 5)          Rs.90          Rs.150\n");
    printf("          \t\t\tHyderabad-Chennai(route 6)          Rs.120          Rs.300\n");

printf("#####\n");

    for(int i=1;i<=10;i++)
    {
        printf("\nSelect Your Choice\n");
        printf("1.Adult+Children");
```

```

printf("\n2.Adult");
printf("\nyour choice :");
scanf("%d",&choice);

switch(choice)
{

case 1:

    printf("Enter Route Number ");
    scanf("%d",&r);
printf("\nHow many seats you want for adult : ");
scanf("%d",&ta);
printf("\nHow many seats for children :");
scanf("%d",&tc);
if(r==1)
{
    c=tc*100;
    C=ta*200;
    printf("The Bill To Be paid is");
    printf("\nCost for %d Children=RS.%d",tc,c);
    printf("\nCost for %d Adult =Rs.%d",ta,C);
    printf("\nTotal Cost      =%d",c+C);
    break;
}
else if(r==2)
{
    c=tc*90;
    C=ta*150;
    printf("The Bill To Be paid is");
    printf("\nCost for %d Children=RS.%d",tc,c);
    printf("\nCost for %d Adult =Rs.%d",ta,C);
    printf("\nTotal Cost      =%d",c+C);
    break;
}
}

```

```

else if(r==3)
{
    c=tc*120;
    C=ta*300;

    printf("The Bill To Be paid is");
    printf("\nCost for %d Children=RS.%d",tc,c);
    printf("\nCost for %d Adult  =Rs.%d",ta,C);
    printf("\nTotal Cost      =%d",c+C);

    break;
}
else if(r==4)
{
    c=tc*100;
    C=ta*200;

    printf("The Bill To Be paid is");
    printf("\nCost for %d Children=RS.%d",tc,c);
    printf("\nCost for %d Adult  =Rs.%d",ta,C);
    printf("\nTotal Cost      =%d",c+C);

    break;
}
else if(r==5)
{
    c=tc*90;
    C=ta*150;

    printf("The Bill To Be paid is");
    printf("\nCost for %d Children=RS.%d",tc,c);
    printf("\nCost for %d Adult  =Rs.%d",ta,C);
    printf("\nTotal Cost      =%d",c+C);

    break;
}
else if(r==6)
{
    c=tc*120;
    C=ta*300;

```

```

printf("The Bill To Be paid is");
printf("\nCost for %d Children=RS.%d",tc,c);
printf("\nCost for %d Adult  =Rs.%d",ta,C);
printf("\nTotal Cost      =%d",c+C);
break;
}

case 2:

printf("Enter Route Number ");
scanf("%d",&r);
printf("\nHow many seats you want for adult : ");
scanf("%d",&ta);
if(r==1)
{
C=ta*200;
printf("The Bill To Be paid is");
printf("\nCost for %d Adult  =Rs.%d",ta,C);
printf("\nTotal Cost      =Rs.%d",C);
break;
}
else if(r==2)
{
C=ta*150;
printf("The Bill To Be paid is");
printf("\nCost for %d Adult  =Rs.%d",ta,C);
printf("\nTotal Cost      =%d",C);
break;
}
else if(r==3)
{
c=tc*120;
C=ta*500;
printf("The Bill To Be paid is");
printf("\nCost for %d Adult  =Rs.%d",ta,C);
printf("\nTotal Cost      =%d",C);

```

```

        break;
    }
    if(r==4)
    {
        C=ta*200;
        printf("The Bill To Be paid is");
        printf("\nCost for %d Adult  =Rs.%d",ta,C);
        printf("\nTotal Cost      =Rs.%d",C);
        break;
    }
    if(r==5)
    {
        C=ta*150;
        printf("The Bill To Be paid is");
        printf("\nCost for %d Adult  =Rs.%d",ta,C);
        printf("\nTotal Cost      =Rs.%d",C);
        break;
    }
    if(r==6)
    {
        C=ta*300;
        printf("The Bill To Be paid is");
        printf("\nCost for %d Adult  =Rs.%d",ta,C);
        printf("\nTotal Cost      =Rs.%d",C);
        break;
    }
    getch();
}
}

```

} Code Screenshots (done in Code-Blocks)

The screenshot displays a Windows desktop environment. The primary application is Visual Studio Code, which is open to a C++ source file named 'main.c'. The code implements a simple train reservation system. It includes standard headers and defines a main function that uses printf to output a menu of train routes and their fares. The menu lists routes between Chennai and Bangalore, Chennai and Vizag, Chennai and Hyderabad, and Bangalore and Chennai. Fares are listed for adults and children. A loop prompts the user to select a choice, and the program prints the selected option.

The status bar at the bottom of the window shows the following information:

- File Path: C:\Users\vevan\Desktop\New folder\revanth kumar reddy\main.c
- Language: C/C++
- Window Title: Windows (CR+LF)
- Editor Position: WINDOWS-1252 Line 23, Col 1, Pos 1521
- Encoding: Insert
- Theme: Read/Write default
- System Clock: 18:23 18-01-2022

Screenshot-2

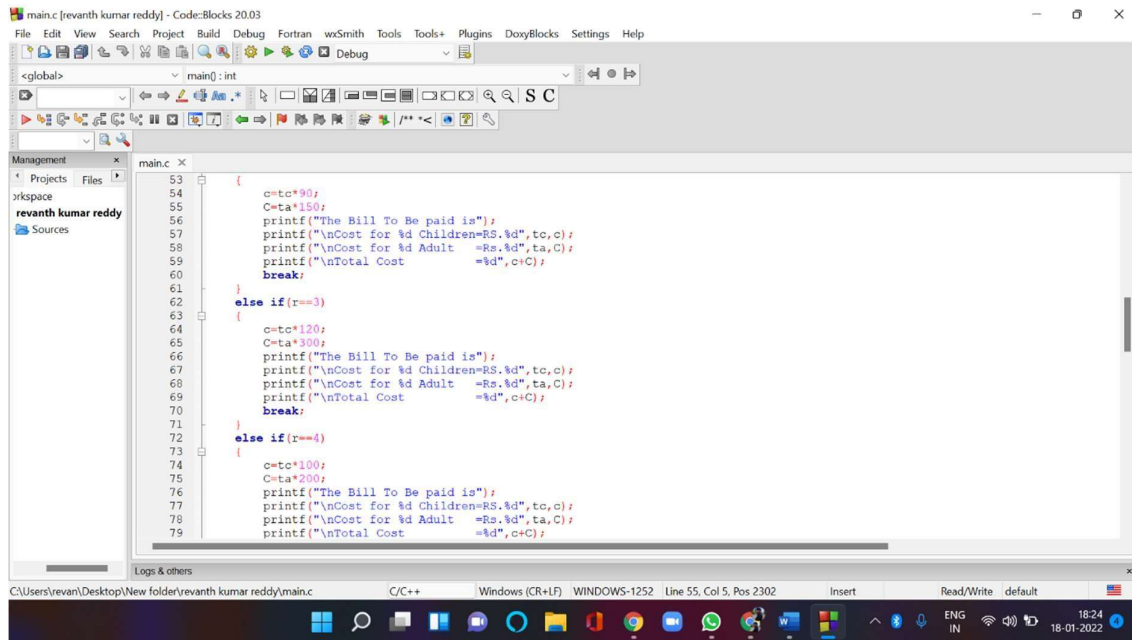
The screenshot displays the Visual Studio Code interface with the following details:

- Menu Bar:** File, Edit, View, Search, Project, Build, Debug, Fortran, wxSmith, Tools, Tools+, Plugins, DoxyBlocks, Settings, Help.
- Toolbar:** Includes icons for file operations, search, and execution.
- Editor Area:**
 - Scope: `<global>`, File: `main()`, Line: `int`.
 - Code content (main.c):

```

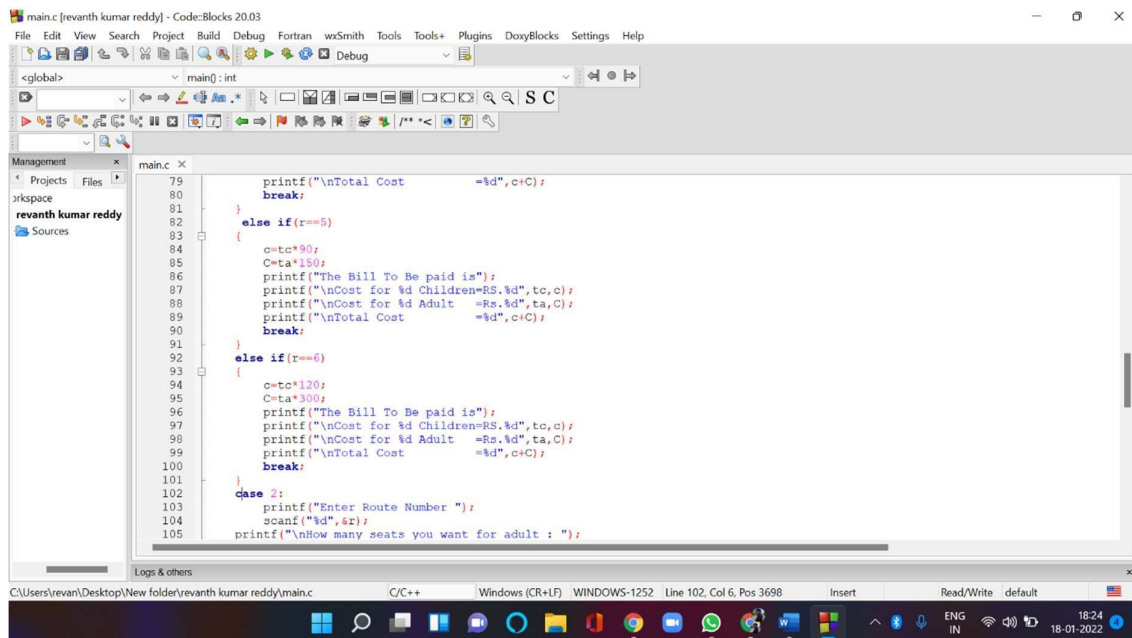
27 printf("1.Adult+Children");
28 printf("\n2.Adult");
29 printf("\nyour choice :");
30 scanf("%d",&choice);
31
32 switch(choice)
33 {
34
35 case 1:
36     printf("Enter Route Number ");
37     scanf("%d",&r);
38     printf("\nHow many seats you want for adult : ");
39     scanf("%d",&ta);
40     printf("\nHow many seats for children :");
41     scanf("%d",&tc);
42     if(r==1)
43     {
44         c=tc*100;
45         C=ta*200;
46         printf("The Bill To Be paid is");
47         printf("\nCost for %d Children=RS.%d",tc,c);
48         printf("\nCost for %d Adult    =Rs.%d",ta,C);
49         printf("\nTotal Cost      =%d",c+C);
50         break;
51     }
52     else if(r==2)
53     {

```
- Left Panel:** Management view showing 'Projects' and 'Files' for 'rkspace', with 'revan kumar reddy' as the source.
- Bottom Panel:** Logs and others.
- Status Bar:** C/C++, Windows (CR+LF), WINDOWS-1252, Line 29, Col 4, Pos 1659, Insert, Read/Write, default.
- Taskbar:** Shows application icons and system clock (18:24, 18-01-2022).



```
53 {
54     c=tc*90;
55     C=ta*150;
56     printf("The Bill To Be paid is");
57     printf("\nCost for %d Children=RS.%d",tc,c);
58     printf("\nCost for %d Adult    =Rs.%d",ta,C);
59     printf("\nTotal Cost      =%d",c+C);
60     break;
61 }
62 else if (r==3)
63 {
64     c=tc*120;
65     C=ta*300;
66     printf("The Bill To Be paid is");
67     printf("\nCost for %d Children=RS.%d",tc,c);
68     printf("\nCost for %d Adult    =Rs.%d",ta,C);
69     printf("\nTotal Cost      =%d",c+C);
70     break;
71 }
72 else if (r==4)
73 {
74     c=tc*100;
75     C=ta*200;
76     printf("The Bill To Be paid is");
77     printf("\nCost for %d Children=RS.%d",tc,c);
78     printf("\nCost for %d Adult    =Rs.%d",ta,C);
79     printf("\nTotal Cost      =%d",c+C);
```

Screenshot-4



```
79     printf("\nTotal Cost      =%d",c+C);
80     break;
81 }
82 else if (r==5)
83 {
84     c=tc*90;
85     C=ta*150;
86     printf("The Bill To Be paid is");
87     printf("\nCost for %d Children=RS.%d",tc,c);
88     printf("\nCost for %d Adult    =Rs.%d",ta,C);
89     printf("\nTotal Cost      =%d",c+C);
90     break;
91 }
92 else if (r==6)
93 {
94     c=tc*120;
95     C=ta*300;
96     printf("The Bill To Be paid is");
97     printf("\nCost for %d Children=RS.%d",tc,c);
98     printf("\nCost for %d Adult    =Rs.%d",ta,C);
99     printf("\nTotal Cost      =%d",c+C);
100     break;
101 }
102 case 2:
103     printf("Enter Route Number ");
104     scanf("%d",&r);
105     printf("\nHow many seats you want for adult : ");
```

Screenshot-5

```
105 printf("\nHow many seats you want for adult : ");
106 scanf("%d",&ta);
107 if(r==1)
108 {
109     C=ta*200;
110     printf("The Bill To Be paid is");
111     printf("\nCost for %d Adult    =Rs.%d",ta,C);
112     printf("\nTotal Cost          =Rs.%d",C);
113     break;
114 }
115 else if(r==2)
116 {
117     C=ta*150;
118     printf("The Bill To Be paid is");
119     printf("\nCost for %d Adult    =Rs.%d",ta,C);
120     printf("\nTotal Cost          =Rs.%d",C);
121     break;
122 }
123 else if(r==3)
124 {
125     C=ta*120;
126     C=ta*500;
127     printf("The Bill To Be paid is");
128     printf("\nCost for %d Adult    =Rs.%d",ta,C);
129     printf("\nTotal Cost          =Rs.%d",C);
130     break;
131 }
```

Screenshot-6

```
130     break;
131 }
132 if(r==4)
133 {
134     C=ta*100;
135     printf("The Bill To Be paid is");
136     printf("\nCost for %d Adult    =Rs.%d",ta,C);
137     printf("\nTotal Cost          =Rs.%d",C);
138     break;
139 }
140 if(r==5)
141 {
142     C=ta*75;
143     printf("The Bill To Be paid is");
144     printf("\nCost for %d Adult    =Rs.%d",ta,C);
145     printf("\nTotal Cost          =Rs.%d",C);
146     break;
147 }
148 if(r==6)
149 {
150     C=ta*50;
151     printf("The Bill To Be paid is");
152     printf("\nCost for %d Adult    =Rs.%d",ta,C);
153     printf("\nTotal Cost          =Rs.%d",C);
154     break;
155 }
156 getch();
```

Screenshot-7


```
135     printf("The Bill To Be paid is");
136     printf("\nCost for %d Adult    =Rs.%d",ta,C);
137     printf("\nTotal Cost          =Rs.%d",C);
138     break;
139 }
140 if(r==5)
141 {
142     C=ta*150;
143     printf("The Bill To Be paid is");
144     printf("\nCost for %d Adult    =Rs.%d",ta,C);
145     printf("\nTotal Cost          =Rs.%d",C);
146     break;
147 }
148 if(r==6)
149 {
150     C=ta*300;
151     printf("The Bill To Be paid is");
152     printf("\nCost for %d Adult    =Rs.%d",ta,C);
153     printf("\nTotal Cost          =Rs.%d",C);
154     break;
155 }
156 getch();
157 }
158 }
159 }
160 }
```

#ALGORITHM FOR MY CODE

Step-1:

Start

Step-2:

Initialize variables

Step-3:

Take the input from the user and calculate the price according to route

4:

Case1:Adult+Children

- (if r=1 book tickets for route number 1 or
- if r=2 book tickets for route number 2 or
- if r=3 book tickets for route number 3 or
- if r=4 book tickets for route number 4 or
- if r=5 book tickets for route number 5 else go book route number 6)

Case2:Adult

- (if r=1 book tickets for route number 1 or

if r=2 book tickets for route number 2 or
if r=3 book tickets for route number 3 or
if r=4 book tickets for route number 4 or
if r=5 book tickets for route number 5 else go book route number 6)

Case3:Exit

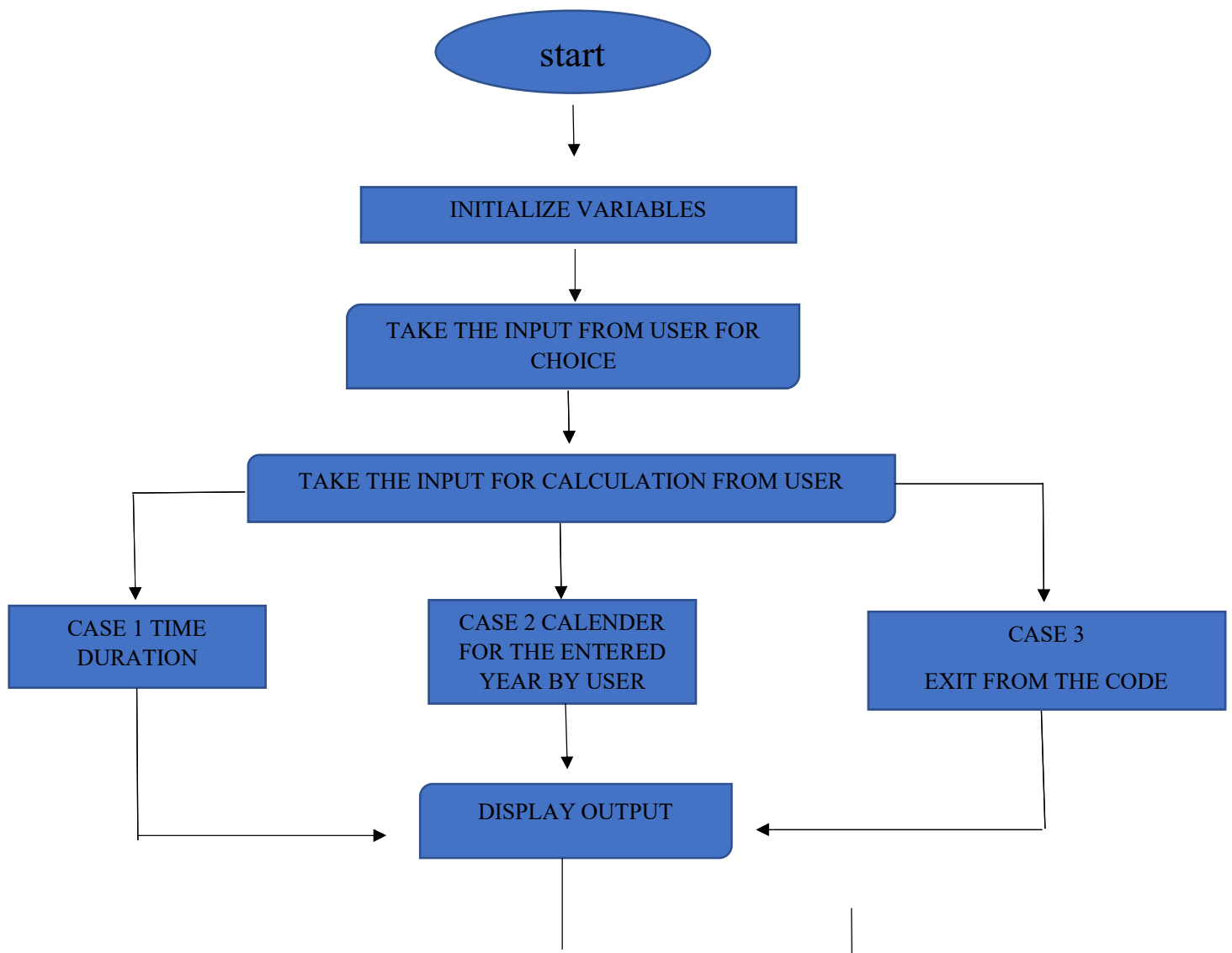
Step-5:

Display the amount according to the route that choosed by the user

Step-6:

Stop.

#Flow Chart





Output screen :

Case1:

```
"C:\Users\revan\Desktop\New folder\revanth kumar reddy\bin\Debug\revanth kumar reddy.exe"

*****WELCOME*****
****Train Reservation System****
(NOTE: These rates are approved by IRCTC)
STATION TO STATION      CHILDREN      ADULT
                        (Per Person)  (Per Person)
Chennai-Banglore(route 1) Rs.100        Rs.200
Chennai-Vizag  (route 2)  Rs.90         Rs.150
Chennai-Hyderabad(route 3) Rs.120        Rs.300
Banglore-Chennai(route 4)  Rs.100        Rs.200
Vizag-Chennai  (route 5)  Rs.90         Rs.150
Hyderabad-Chennai(route 6) Rs.120        Rs.300

Select Your Choice
1.Adult+Children
2.Adult
your choice :1
Enter Route Number 1

How many seats you want for adult : 1

How many seats for children :1
The Bill To Be paid is
Cost for 1 Children=RS.100
Cost for 1 Adult  =Rs.200
Total Cost      =300
Select Your Choice
1.Adult+Children
2.Adult
your choice :
```

CASE 2:

```
"C:\Users\revan\Desktop\New folder\revanth kumar reddy\bin\Debug\revanth kumar reddy.exe"

*****WELCOME*****
****Train Reservation System****
(NOTE: These rates are approved by IRCTC)
STATION TO STATION      CHILDREN      ADULT
                        (Per Person)  (Per Person)
Chennai-Banglore(route 1) Rs.100        Rs.200
Chennai-Vizag  (route 2)  Rs.90         Rs.150
Chennai-Hyderabad(route 3) Rs.120        Rs.300
Banglore-Chennai(route 4)  Rs.100        Rs.200
Vizag-Chennai  (route 5)  Rs.90         Rs.150
Hyderabad-Chennai(route 6) Rs.120        Rs.300

Select Your Choice
1.Adult+Children
2.Adult
your choice :2
Enter Route Number 2

How many seats you want for adult : 2

The Bill To Be paid is
Cost for 2 Adult  =Rs.300
Total Cost      =300
Select Your Choice
1.Adult+Children
2.Adult
your choice :_
```

