**LAB TASK # 5**

**Question # 1 :**

**INPUT :**

#include<iostream>

#include<conio.h>

#include<string.h>

using namespace std;

class flight {

public:

int flightno;

string source;

string destination;

int numberofseats;

public:

flight() {

};

flight(int fl, string from, string to, int n) {

flightno = fl;

if (from.length() <= 3)

{

source = from;

}

else

{

source = from.substr(0, 3);

}

if (to.length() <= 3)

{

destination = to;

}

else

{

destination = to.substr(0, 3);

}

numberofseats = n;

};

flight(int fl, int n) :flightno(fl), numberofseats(n)

{

source = "";

destination = "";

};

flight(int fl) :flightno(fl)

{

numberofseats = 0;

source = "";

destination = "";

};

void setflightno(int fl)

{

flightno = fl;

}

void setsource(string s)

{

source = s;

}

void setdestination(string d)

{

destination = d;

}

void setnumberofseats(int n)

{

numberofseats = n;

}

string getsource()

{

return source;

}

string getdestination()

{

return destination;

}

int getnoofseats()

{

return numberofseats;

}

void reserve(int tellseats)

{

if (tellseats <= numberofseats)

{

numberofseats = numberofseats - tellseats;

cout << "your resereved seats are" << tellseats << endl;

}

else

cout << "No seats are available" << endl;

}

void cancel(int tellseats)

{

if (tellseats <= numberofseats)

{

numberofseats = numberofseats + tellseats;

}

else

{

cout << "No such big seats can be cancelled" << endl;

}

}

void showdata() {

cout << "The flight number is\t" << flightno << endl;

cout << "From : " << source << endl;

cout << "To : " << destination << endl;

cout << "Status of seats : " << numberofseats << endl;

cout << "Seats remaining : " << 340 - numberofseats << endl;

}

void takinginfo(flight f) {

cout << "Enter flight no : ";

cin >> flightno;

cout << "Source : ";

string r;

cin >> r;

if (r.length() <= 3)

{

source = r;

}

else

{

source = r.substr(0, 3);

}

cout << "Enter destination : ";

string m;

cin >> m;

if (m.length() <= 3) {

destination = m;

}

else {

destination = m.substr(0, 3);

}

cout << "Enter seats to reaserve : ";

cin >> numberofseats;

}

};

int main() {

flight f1;

cout << "For first flight" << endl;

f1.takinginfo(f1);

f1.showdata();

flight f2;

cout << "For second flight" << endl;

f2.takinginfo(f2);

if (f2.flightno == f2.flightno) {

cout << "Flight no is same" << endl;

}

else

{

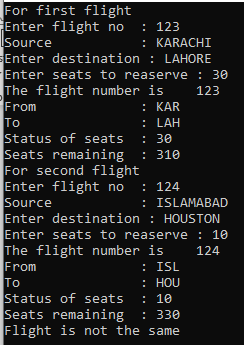
f2.showdata();

cout << "Flight is not the same" << endl;

}

}

**OUTPUT:**



**Question # 2 :**

**INPUT :**

#include <iostream>

#include <conio.h>

#include <string>

using namespace std;

class car

{

public:

string brandname;

double price;

string color;

double odometer;

public:

car()

{};

car(string bn, int p, string c, int o)

{

brandname = bn;

price = p;

color = c;

odometer = o;

};

double getprice()

{

return price \* (1 - (odometer / 600000));

}

int updatemileage(double traveldistance)

{

return odometer + traveldistance;

}

void outputdetails()

{

cout << "------The details of car are given below------" << endl;

cout << "The Brand Name of car is : " << brandname << endl;

cout << "The price of car when it is new is : " << price << endl;

cout << "The price of car after use is : " << getprice() << endl;

cout << "The color of car is : " << color << endl;

cout << "Tne no of miles that covered by the car is : " << odometer<< endl;

}

};

int main()

{

string bname;

int pri;

string col;

int odo;

cout << "Enter brand name : "; cin >> bname;

cout << "Enter price of car when it is brand new : "; cin >> pri;

cout << "Enter color of car : "; cin >> col;

cout << "Enter odometer reading of car : "; cin >> odo;

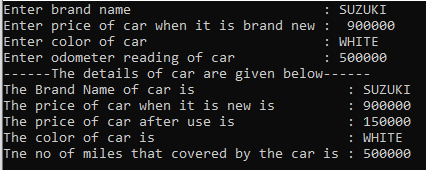
car c1(bname, pri, col, odo);

c1.updatemileage(2000);

c1.outputdetails();

}

**OUTPUT:**



**Question # 3 :**

**INPUT :**

#include <iostream>

#include <conio.h>

#include <string>

using namespace std;

int main()

{

double price\_2lb\_bag = 5.50;

double large\_box = 1.80;

double medium\_box = 1.00;

double small\_box = 0.60;

int no\_of\_boxes;

cout << "Enter number of boxes : "; cin >> no\_of\_boxes;

int used\_large\_box;

int used\_medium\_box;

int used\_small\_box;

used\_large\_box = no\_of\_boxes / 20;

used\_medium\_box = (no\_of\_boxes % 20) / 10;

used\_small\_box =((no\_of\_boxes % 20) % 10)%5;

if(used\_small\_box!=0)

{

used\_small\_box = 1;

}

else

{

used\_small\_box = 0;

}

cout << "-----------------------------" << endl;

cout << "Number of bags ordered : " << no\_of\_boxes << endl;

cout << "The cost of order : $ " << price\_2lb\_bag \* no\_of\_boxes << endl<<endl;

cout << "Boxes used : " << endl;

cout << "\t" << used\_large\_box << " Large : $" << used\_large\_box \* large\_box << endl;

cout << "\t" << used\_medium\_box << " Medium : $" << used\_medium\_box \* medium\_box << endl;

cout << "\t" << used\_small\_box << " Small : $" << used\_small\_box \* small\_box << endl<<endl;

cout << "Your total cost is : $" << (price\_2lb\_bag \* no\_of\_boxes) + (used\_large\_box \* large\_box) + (used\_medium\_box \* medium\_box) + (used\_small\_box \* small\_box) << endl;;

}

**OUTPUT :**

