TASK-4

#include<bits/stdc++.h>

using namespace std;

//distance map which has distance from Dhaka associated to each destination

map<string, int> d\_map;

class Flight {

private:

static int count;

int flightNo;

int maxPassengerCap;

string destination;

bool check\_fuel(int n)

{

if(n<=2000) return true;

else false;

}

public:

set\_fno()

{

count++;

flightNo = count;

}

int get\_fno()

{

return flightNo;

}

set\_maxcap(int n)

{

maxPassengerCap = n;

}

int get\_maxcap()

{

return maxPassengerCap;

}

set\_dest(string s)

{

destination = s;

}

string get\_dest()

{

return destination;

}

Flight()

{

set\_fno();

}

Flight(int max,string dest)

{

set\_fno();

set\_maxcap(max);

set\_dest(dest);

}

set\_info(int max,string dest)

{

set\_maxcap(max);

set\_dest(dest);

}

void show\_info()

{

cout<<get\_fno()<<" "<<get\_maxcap()<<" "<<get\_dest()

<<" "<<calc\_fuel()<<endl;

}

int calc\_fuel()

{

int distance = d\_map[destination];

int fuel = static\_cast<int>(0.25\*distance);

if(check\_fuel(fuel))

{

return fuel;

}

else

{

cout<<"Error: Fuel Capacity Exceeded"<<endl;

return -1;

}

}

};

int Flight::count =0;

class Airline

{

private:

Flight f[10];

public:

void set\_info()

{

for(int i=0;i<10;i++)

{

cout<<"Enter the info for flight "<<i+1<<endl;

int a;

string b;

cin>>a>>b;

f[i].set\_info(a,b);

}

}

void show\_info()

{

for(int i=0;i<10;i++)

{

cout<<"Info of flight: "<<i+1<<endl;

f[i].show\_info();

}

}

};