**OOPS ASSIGNMENT 01**

**Question#01: FLIGHT CLASS:**

#include<iostream>

#include<conio.h>

using namespace std;

class plane

{ private:

int seat[12][7],fseat,bseat,eseat,x,y,z;

public:

plane(){fseat=0,bseat=0,eseat=0;}

void setfseat(int n)

{

if(14-(fseat+n)>=0)

{ fseat=fseat+n;

cout<<"Congratulation you have reserved your "<<fseat<<"seat"<<endl;

cout<<"your total fair is "<<n\*105000<<endl;

cout<<"your rservation seat are as follows"<<endl;

void setseatdis(); }

else

cout<<"sorry we dont have enough seats"<<endl;

}

void setbseat(int o)

{

if(35-(bseat+o)>=0)

{ bseat=bseat+o;

cout<<"Congratulation you have reserved your "<<bseat<<"seat"<<endl;

cout<<"your total fair is "<<o\*65000<<endl;

cout<<"your rservation seat are as follows"<<endl;

void setseatdis(); }

else

cout<<"sorry we dont have enough seats"<<endl;

}

void seteseat(int m)

{

if(35-(eseat+m)>=0)

{ eseat=eseat+m;

cout<<"Congratulation you have reserved your "<<eseat<<"seat"<<endl;

cout <<"your total fair is "<<m\*35000<<endl;

cout<<"your rservation seat are as follows"<<endl;

void setseatdis(); }

else

cout<<"sorry we dont have enough seats"<<endl; }

void setseatdis()

{ x=fseat;y=bseat;z=eseat; int i,j;

for(i=0;i<=11;i++)

{ for(j=0;j<=6;j++)

{ if(x>0&&i<2)

{seat[i][j]=1;x--;}

else if (y>0&&i>1&&i<7)

{seat[i][j]=1;y--;}

else if(z>0&&i>6&&i<12)

{seat[i][j]=1;z--;}

else

seat[i][j]=0; } }

for(i=0;i<=11;i++)

{ for(j=0;j<=6;j++)

{ cout<<seat[i][j]<<" "; }

cout<<endl; } }

void setfair()

{ cout<<"Fair of first class seat is 105000"<<endl;

cout<<"Fair of buisness class seat is 65000"<<endl;

cout<<"Fair of economy class seat is 35000"<<endl; }

void setreset()

{ int i,j;

for(i=0;i<=11;i++)

{ for(j=0;j<=6;j++)

{ seat[i][j]=0; } }

fseat=0,bseat=0,eseat=0;

setseatdis(); } };

main()

{ plane p;

int a,f,b,e,c,k;

char n;

do{

cout<<"\t\t\tWELLCOME TO OUR AIRPLANE RESERVATION CENTER"<<endl;

cout<<"1.Book First Class seats"<<endl;

cout<<"2.Book Buisness Class seats"<<endl;

cout<<"3.Book Economy Class seats "<<endl;

cout<<"4.View Air Plane Seating Assignment"<<endl;

cout<<"5.Know Fair"<<endl;

cout<<"6.System Reset"<<endl;

cout<<"7.Exist From The Booking System"<<endl;

cout<<"Enter Your Choice"<<endl;

cin>>a;

switch(a)

{

case 1:

cout<<"Enter the number of First Class seats that you want to reserved"<<endl;

cin>>f;

p.setfseat(f);

p.setseatdis();

break;

case 2:

cout<<"Enter the number of Buisness Class seats that you want to reserved"<<endl;

cin>>b;

p.setbseat(b);

p.setseatdis();

break;

case 3:

cout<<"Enter the number of Economy Class seats that you want to reserved"<<endl;

cin>>e;

p.seteseat(e);

p.setseatdis(); break;

case 4:

p.setseatdis();

break;

case 5:

cout<<"The fair of different class are as follows"<<endl;

p.setfair();

break;

case 6:

cout<<"Do you want to exit from the system Y=yes and N=no!"<<endl;

cin>>n;

if(n=='N')break;

else

p.setseatdis();

break;

case 7:

cout<<"You have exist from the flight booking system "<<endl;

break;

default:

cout<<"INVALID CASE";

} }while(a!=7);

getch();

return 0; }

**Question#02: FAN CLASS:**

#include<iostream>

#include<conio.h>

#include<string.h>

using namespace std;

class fan

{ private:

int speed;

double radius;

string color;

int status;

public:

fan() {}

fan(int s,double r,string c,int t):speed(s),radius(r),color(c),status(t) {}

void setspeed(int s)

{ speed=s; }

int getspeed()

{ if(speed==1){cout<<"The fan speed is fast"<<endl;}

else if(speed==2){cout<<"The fan speed is medium"<<endl;}

else {cout<<"THe fan speed is slow"<<endl;}

return speed; }

void setradius(double r)

{ radius=r; }

double getradius()

{ cout<<"Your fan radius is "<<radius<<" cm";

return radius; }

void setcolor(string c)

{ color=c; }

string getcolor()

{ return color; }

void setstatus(int t)

{ status=t; }

int getstatus()

{ if(status==1)

cout<<"your fan is ON"<<endl;

else

cout<<"your fan is OFF"<<endl;

return status; }

void showdata()

{ cout<<"the color of your fan is "<<color<<endl;

getradius();cout<<endl;

getspeed();

getstatus(); } };

main()

{ int a, b;string c;int s;

fan f,f1(3,5,"blue",1);

cout<<"Enter the color of your fan"<<endl;

cin>>c;

f.setcolor(c);

cout<<"Enter the radius of your fan"<<endl;

cin>>b;

f.setradius(b);

cout<<"Enter the speed of the fan "<<endl;

cout<<"1.FAST\n2.MEDIUM\n3.SLOW"<<endl;

cin>>a;

f.setspeed(a);

cout<<"Enter status of your fan \n 1.ON \n 2.OFF"<<endl;

cin>>s;

f.setstatus(s);

f.showdata();cout<<endl;

cout<<"The default value of your fan are"<<endl;

f1.showdata();

getch();

return 0; }