

## 11 Yashraj Deepak Devrat

```
#include<iostream>
#include<string.h>
using namespace std;

class flight
{
    public:
        int am[10][10];
        char city_index[10][10];
        flight();
        int create();
        void display(int city_count);

};

flight::flight()
{
    int i,j;
    for(i=0;i<10;i++)
    {
        strcpy(city_index[i],"xx");
    }
    for(i=0;i<10;i++)
    {
```

```

        for(j=0;j<10;j++)
        {
            am[i][j]=0;
        }
    }
}

```

```

int flight::create()
{
    int city_count=0,j,si,di,wt;
    char s[10],d[10],c;
    do
    {
        cout<<"\n\tEnter Source City    : ";
        cin>>s;
        cout<<"\n\tEnter Destination City : ";
        cin>>d;
        for(j=0;j<10;j++)
        {
            if(strcmp(city_index[j],s)==0)
                break;
        }
        if(j==10)
        {
            strcpy(city_index[city_count],s);
            city_count++;
        }
    }
}

```

```
for(j=0;j<10;j++)
{
    if(strcmp(city_index[j],d)==0)
        break;
}
```

```
if(j==10)
{
    strcpy(city_index[city_count],d);
    city_count++;
}
```

```
cout<<"\n\t Enter Distance From "<<s<<" And
"<<d<<": ";
cin>>wt;
```

```
for(j=0;j<10;j++)
{
    if(strcmp(city_index[j],s)==0)
        si=j;
    if(strcmp(city_index[j],d)==0)
        di=j;
}
```

```

        am[si][di]=wt;
        cout<<"\n\t Do you want to add more
cities.....(y/n) : ";
        cin>>c;
        }while(c=='y'||c=='Y');
        return(city_count);
    }
    void flight::display(int city_count)
    {
        int i,j;
        cout<<"\n\t Displaying Adjacency Matrix :\n\t";
        for(i=0;i<city_count;i++)
            cout<<"\t"<<city_index[i];
        cout<<"\n";

        for(i=0;i<city_count;i++)
        {
            cout<<"\t"<<city_index[i];
            for(j=0;j<city_count;j++)
            {
                cout<<"\t"<<am[i][j];
            }
            cout<<"\n";
        }
    }

    int main()

```

```

{
    flight f;
    int n,city_count;
    char c;
    do
    {
        cout<<"\n\t*** Flight Main Menu *****";
        cout<<"\n\t1. Create \n\t2. Adjacency Matrix\n\t3.
Exit";
        cout<<"\n\t....Enter your choice : ";
        cin>>n;
        switch(n)
        {
            case 1:
                city_count=f.create();
                break;
            case 2:
                f.display(city_count);
                break;
            case 3:
                return 0;
        }
        cout<<"\n\t Do you Want to Continue in Main
Menu....(y/n) : ";
        cin>>c;
    }while(c=='y' || c=='Y');
    return 0;
}

```

}



