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## Assignment 6 Input

```
:
#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\tEnter 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\tDisplaying 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\tDo you Want to Continue in Main Menu...(y/n): ";
    cin>>c;
  }while(c=='y' || c=='Y');
  return 0;
}

```

## Output :

```

***Flight Main Menu***
1.Create
2.Adjacency Matrix
3.Exit

....Enter your choice: 1

Enter Source City: pune

Enter Destination city: mumbai

Enter Distance From pune And mumbai: 160


Do you want to add more cities...(y/n): y

Enter Source City: mumbai

Enter Destination city: nagpur

Enter Distance From mumbai And nagpur: 770


Do you want to add more cities...(y/n): y

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Enter Source City: nagpur

Enter Destination city: nashik

Enter Distance From nagpur And nashik: 625

Do you want to add more cities...(y/n): y

Enter Source City: nashik

Enter Destination city: pune

Enter Distance From nashik And pune: 213

Do you want to add more cities...(y/n): n

Do you Want to Continue in Main Menu...(y/n): y

\*\*\*Flight Main Menu\*\*\*

- 1.Create
- 2.Adjacency Matrix
- 3.Exit

....Enter your choice: 2

DDisplaying Adjacency Matrix:

	pune	mumbai	nagpur	nashik
pune	0	160	0	0
mumbai	0	0	0	0
nagpur	0	0	0	625
nashik	213	0	0	0

Do you Want to Continue in Main Menu...(y/n): y

\*\*\*Flight Main Menu\*\*\*

- 1.Create
- 2.Adjacency Matrix
- 3.Exit

....Enter your choice: 3