

```

#include <bits/stdc++.h>
using namespace std;

#define MAX 10
int n;

class source {
    char adj_new[MAX], adj_old[MAX];
    int table_new[MAX], table_old[MAX];
public:
    source() {
        for (int i=0; i<MAX; i++) table_old[i] = table_new[i] = 99;
    }
    void copy() {
        for (int i=0; i<n; i++) {
            adj_old[i] = adj_new[i];
            table_old[i] = table_new[i];
        }
    }
    int equal() {
        for (int i=0; i<n; i++)
            if (table_old[i] != table_new[i] || adj_new[i] != adj_old[i]) return 1;
        return 0;
    }
    void input (int j) {
        cout << "Enter 1 if the corresponding source is adjacent to source."

```



```
<<(char)('A'+j)<<" else enter 99: " << endl <<" ";
```

```
for (int i=0; i<n; i++)
```

```
if (i!=8) cout<<(char)('A'+i)<<" ";
```

```
cout<<"\nEnter matrix:";
```

```
for (int i=0; i<n ; i++) {
```

```
if (i==8)
```

```
table_new[i] = 0;
```

```
else
```

```
cin>>table_new[i];
```

```
adj_new[i] = (char)('A'+i);
```

```
}
```

```
cout<<endl;
```

```
}
```

```
void display()
```

```
cout<<"\n Destination Router:";
```

```
for (int i=0; i<n; i++) cout<<(char)('A'+i)<<" ";
```

```
cout<<"\n outgoing line:";
```

```
for (int i=0; i<n; i++) cout<<(new[i]<<"
```

```
}
```

```
break;
```

```
}
```

```
int main()
```

```
cout<<" Enter the number the source (<<MAX<<"); cin>>n;
```

```
for (int i=0; i<n; i++) s[i].input(i);
```

```
build-table();
```

```
for (int i=0; i<n; i++) {
```

```
cout<<" Router Table entries for source "<<(char)
```

```
('A'+i)<<" : - ";
```

```
s[i].display();
```

```
} } cout<<endl<<endl;
```