

Akash Asahraf Uddin Ahmed 21-45114-2

```
#include <iostream>
```

```
#include <string> using
```

```
namespace std;
```

```
string labelRelationalOperator(const string&op){
```

```
    if (op == "<"){
```

```
        return "Less than";
```

```
    }
```

```
    else if (op == ">"){
```

```
        return "Greater than";
```

```
    }
```

```
    else if (op == "<="){
```

```
        return "Less than or equal to";
```

```
    }
```

```
    else if (op == ">="){
```

```
        return "Greater than or equal to";
```

```
    }
```

```
    else if (op == "=="){
```

```
        return "Equal to";
    }
    else if (op == "!="){

        return "Not equal to";
    }
    else{

        return "unknown operator";
    }

}

int main(){

    string expression;

    cout<<"Enter an expression: ";

    cin>>expression;

    size_t ps = 0;
```

```

while ((ps = expression.find_first_of("<=>!",ps))!=string::npos)    {

    string opString=expression.substr(ps,2);
string label=labelRelationalOperator(opString);

    if (label != "unknown operator") {

        cout<<opString<<" "<<label;

    }
else {

        opString = expression.substr(ps,1);
label=labelRelationalOperator(opString);

        if (label!="unknown operator"){

            cout<<opString<<" "<<label;

        }

    }

ps++;

}

cout<<endl;

```

```
return 0;
```

```
}
```

