

```

1  #include<iostream>
2  using namespace std;
3
4  int main()
5  {
6      //Declaring and initializing input lines
7      int inputI0 = 0,inputI1 = 1,inputI2 = 3,inputI3 = 3, inputI4 = 4, inputI5 = 5, inputI6 = 6, inputI7 = 7;
8
9
10     //Declaring and initializing select lines
11     int s0=1, s1=1, s2 =1;
12
13     //Declaring and initializing output line
14     int outputF=0;
15
16
17     //Using Conditional Operator to implement 8x1 MUX
18     outputF = (s0 == 0) ? (s1 == 0) ? (s2 == 0) ? inputI0 : inputI1 : (s2 == 0) ? inputI2 : inputI3 : (s1 ==
19 0) ? (s2 == 0) ? inputI4 : inputI5 : (s2 == 0) ? inputI6 : inputI7;
20
21     //Displaying the output
22     cout<<"Output="<<outputF;
23
24     return 0;
25 }

```