```
1 // # Chapter Three
  # How to use "Logical Oparator (&&, //, !)" in javaScript
     Logical operators are used to determine the logic between variables or values.
4
5
6
     There are Three types of Logical Oparator...
7
     Given that x = 6 and y = 3, the table below explains the logical operators:
8
   -----|
9
                     Description
10
                                     Example
    -----|-----|-----|
11
                       and (x < 10 & y > 1) is true
12
        or
                                | (x == 5 || y == 5)  is false
13
                                 | !(x == y) is true
14
        Ţ
                        not
15
16
17
     Logical Oparator Only Used When We have Two or More Conditions and Result
     Comes from both of Their Participation.
18
19
  *************************************
20
21
  /****************************
22
      23
                    A && B (And Oparator)
24
      -----
25
               true && true = true
26
27
               true && false = false
               false && true = false
28
               false && false = false
29
30
31
                    A | B (Or Oparator)
32
33
34
               true || true = true
               true || false = true
35
               false || true = true
36
37
               false | | false = false
38
39
40
                   !(a > b) (Not Oparator)
      _____
41
      # If defult value is true and use not oparator
42
         sign then chance the value and
43
         This value will be false
44
45
      # If defult value is false and use not
46
        oparator sign then chance the value and
47
        This value will be true
48
49
50
51
52
53
54
55 \, \text{var} \, a = 30
56 \text{ var b} = 20
57 \, \text{var c} = 30
58 \, \text{var} \, d = 40
59
```

60

```
61
 62 if (a > b && c > d) {
      console.log("A is greater than B And C is greater than D")
 64 } else {
      console.log("At Least One Condition is False")
 65
 66 }
 67
 68 /*********** Output **********/
 69 bappy@bAppY MINGW64 ~ JavaScript {Note} All You Need to Know/3. Chapter_Three
 70 $ node "5-logicalOparator.js"
 71 At Least One Condition is False
 73 /*********************************
 74
       _____
 75
                      A | B (Or Oparator)
 76
                 true || true = true
 77
 78
                 true || false = true
 79
                 false | true = true
                 false | | false = false
 80
 81
 82
84 if (a > b | c > d) {
      console.log("A is greater than B Or C is greater than D")
 86 } else {
 87
      console.log("At Least One Condition is False")
 88 }
 89
 90 /************ Output ***********/
 91 bappy@bAppY MINGW64 ~ JavaScript {Note} All You Need to Know/3. Chapter_Three
 92 $ node "5-logicalOparator.js"
 93 At Least One Condition is False
 94 A is greater than B Or C is greater than D
96 /*******************************
       97
98
                      !(a > b) (Not Oparator)
99
      100
      # If defult value is true and use not oparator
101
          sign then chance the value and
          This value will be false
102
103
     # If defult value is false and use not
104
         oparator sign then chance the value and
105
106
         This value will be true
107
   108
109
110 var check = !(a > b)
111 console.log(check)
112
113 /********** Output **********/
114 bappy@bAppY MINGW64 ~ JavaScript {Note} All You Need to Know/3. Chapter_Three
115 $ node "5-logicalOparator.js"
116 At Least One Condition is False
117 A is greater than B Or C is greater than D
118 false
```