

```
1 package week2BooleanConditionalsLoops;
2
3 public class BooleanConditionalsLoops {
4
5     public static void main(String[] args) {
6
7         //create a variable named age and assign it a value of 14
8         int age = 14;
9
10        //print the boolean expression age >= 16 to the console and note the results.
11        //change the value of age to 18 and run again.
12        System.out.println(age >= 16);
13        age = 20;
14        System.out.println(age >= 16);
15
16        //using a conditional, print "You can drive" if age is greater than or equal to 16
17        //and "You cannot drive" otherwise
18        //change the value of age and rerun to see the result
19        boolean hasLicense = false;
20
21        if (age >= 16 && hasLicense) {
22            System.out.println("You can drive");
23        } else {
24            System.out.println("You cannot drive");
25        }
26
27        //add a new variable called hasLicense before the conditional
28        //change the boolean expression in the conditional to additionally include the need
29        for hasLicense to be true
30        //try changing the values of age and hasLicense and note the different results
31
32        //create two new variables - costOfMilk and thirstLevel
33        //create a new conditional that prints "Milk Please" if costOfMilk is less than 2.50
34        //or if thirstLevel is greater than 6 and prints "No Thanks" otherwise
35        //change the values and note the different results
36        double costOfMilk = 3.15;
37        int thirstLevel = 7;
38
39        if (costOfMilk < 2.5 || thirstLevel > 6) {
40            System.out.println("Milk Please");
41        } else {
42            System.out.println("No Thanks");
43        }
44
45        //create two variables called numberOfCookies and numberOfChildren
46        //you will evenly distribute all of the cookies to the children and as the adult
47        //you get to keep the remaining cookies to yourself
48        //use a conditional to print the following based on the following conditions:
49        //if there are 0 cookies remaining, print "Sad Face"
50        //if there are less than 2 cookies, print "Yes!"
51        //if there are less than 5 cookies, print "Whooohoooo!"
52        //if there are 5 or more cookies, print "Jackpot!"
53        int numberOfCookies = 20;
54        int numberOfChildren = 12;
55
56        int remainingCookies = numberOfCookies % numberOfChildren;
```

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57
58     if (remainingCookies >= 5) {
59         System.out.println("Jackpot!");
60     } else if (remainingCookies >= 2) {
61         System.out.println("Whoohoooo!");
62     } else if (remainingCookies > 0) {
63         System.out.println("Yes!");
64     } else {
65         System.out.println("Sad Face");
66     }
67
68     //create a variable called loyaltyMemberStatus and assign the value "SILVER"
69     //create a variable called loyaltyMemberDiscount and assign the value 0.0
70     //using a switch, set the value of loyaltyMemberDiscount based on the following
loyaltyMemberStatus scale
71     //"SILVER" is 0.10, "GOLD" is 0.15, and "PLATINUM" is 0.25
72     String loyaltyMemberStatus = "GOLD";
73     double loyaltyMemberDiscount = 0.0;
74
75     switch(loyaltyMemberStatus) {
76         case "SILVER":
77             loyaltyMemberDiscount = .1;
78             break;
79         case "GOLD":
80             loyaltyMemberDiscount = .15;
81             break;
82         case "PLATINUM":
83             loyaltyMemberDiscount = .25;
84             break;
85     }
86
87     System.out.println(loyaltyMemberDiscount);
88
89     //create a variable called billTotal and assign a value
90     //create a variable called adjustedTotal and assign it the billTotal minus the
loyaltyMemberDiscount percent of the billTotal
91     //if the adjustedBillTotal is greater than $500 upgrade the loyaltyMemberStatus from
SILVER to GOLD or GOLD to PLATINUM
92     double billTotal = 640.50;
93     double adjustedTotal = billTotal - loyaltyMemberDiscount * billTotal;
94     System.out.println(adjustedTotal);
95
96     if (adjustedTotal > 500) {
97         if (loyaltyMemberStatus == "SILVER") {
98             loyaltyMemberStatus = "GOLD";
99         } else if (loyaltyMemberStatus == "GOLD") {
100             loyaltyMemberStatus = "PLATINUM";
101         }
102     }
103
104     System.out.println(loyaltyMemberStatus);
105
106     //create two variables, username and password
107     //create a conditional that prints "login successful" if the username is "Tommy123"
and the password is "12345"
108     //otherwise, print "access denied"
109     String username = "Tommy123";
```

```
110     String password = "12345";
111
112     if (username.equals("Tommy123") && password.equals("12345")) {
113         System.out.println("login successful");
114     } else {
115         System.out.println("access denied");
116     }
117
118
119
120     //write a for loop that prints each number from 0 to 9
121     for (int i = 0; i < 10; i++) {
122         System.out.println(i);
123     }
124
125     //write a for loop that prints each number from 10 to 0 backwards
126     for (int i = 10; i >= 0; i--) {
127         System.out.println(i);
128     }
129
130     //write a for loop that prints every other number from 0 to 100
131     for (int i = 0; i <= 100; i++) {
132         if (i % 2 == 0) {
133             System.out.println(i);
134         }
135     }
136
137     //write a for loop that iterates from 0 to 100 and prints "EVEN" if the number is even
and "ODD" if it's odd
138     for (int i = 0; i <= 100; i++) {
139         if (i % 2 == 0) {
140             System.out.println(i + "EVEN");
141         } else {
142             System.out.println(i + "ODD");
143         }
144     }
145
146     //write a while loop that starts at 100 and iterates backwards by 1 until it reaches 0
147     //divide each number by 3 and print the remainder to the console
148     int i = 100;
149     while (i > 0) {
150         System.out.println(i + " " + (i % 3));
151         i--;
152     }
153
154 }
155
156 }}
```