one in line comment per paragraph

Homework

Selection – Boolean Expressions & if structure

1. Evaluate the following boolean expressions to true or false
   a) `9 < 3` **(false)**
   b) `5 >= 5` **(true)**
   c) `8 != 64 % 8` **(true)**
   d) `'a' == 'A'` **(false)**
   e) `'a' > 'A'` **(true)**

2. **Pass.java:** Write a program which displays a math addition question, and asks the user for the answer and tells them whether they are correct or not.

3. **AgeCheck.java**: Write a program that asks the user's age. If the age is eighteen or more, the program should print "OLD ENOUGH TO VOTE". Otherwise it should print the number of years before voting is possible.

4. **Salary.java** At Jackson boutique, a salesperson makes a monthly base salary of $1000. If the person has made more than 10 sales during the month, then s/he receives an extra commission equal to the number of sales as a percentage of the base salary, e.g., a salesperson who makes 15 sales during the month receives an extra commission of 15% of the base salary. If they sell 20 items, they get an extra commission of 20% of the base salary. Write a program that prompt for the number of sales and determines the total salary for that month.

5. **CheckInt.java:** Read an integer from the keyboard, then check to see whether it is
   a) Positive or negative
      i. *if (the number > 0 then print it is positive)*
      ii. *else if (the number is !=0)*

   b) Even or odd
      if
      else

   c) A multiple of 7 or not
      if
      else

   The number must be displayed together with the results of each of the tests.

6. **Discriminant.java**: In mathematics, the quantity b^2-4ac is called the "discriminant". Write a program that prompts the user for the values of a, b, and c and then displays "No roots" if the discriminant is negative, "One root" if the discriminant is zero, and "Two roots" if the discriminant is positive.