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| 1. Determine the output for each of the following | | |
| (a)  String s1 = “school BUS”;  if (s1.equals(“school bus”))  System.out.println(“Equal”);  else  System.out.println(“Not equal”); | Not equal | |
| (b)  int j = 19, m = 200;  if(j == 18)  m++;  j++;  System.out.println(m);  System.out.println(j); | 200  20  \*Note, j is incremented no matter what because there are no curly brackets | |
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| 3. The sort class below sorts three integers in descending order by reassigning the values. Consider the following examples,   |  |  | | --- | --- | | **Values of a, b, and c before** | **Values of a, b, and c after** | | int a = 5, int b = 6, int c = 2; | a = 2, b = 5, c = 6; | | int a = 6, int b = 2, int c = 5 | a = 2, b = 5, c = 6; | | int a = 2, int b = 6, int c = 5; | A = 2, b = 5, c = 6; |   Complete the sort class below. Your solution only needs to show the reassignment of the values. You do not need to print the values. | |
| public class sort{  public static void main(String args[]){          if(Math.min(a, b)==b && Math.min(b, c) == b){              int temp = a;              a = b;              b = temp;          }          if(Math.min(a, c) == c && Math.min(b, c) ==c){              int temp = a;              a = c;              c = temp;          }          if(Math.min(b,c)==c){              int temp = b;              b = c;              c = temp;          }  }  } | |
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| The HangMan class below accepts guesses from the user for the letters contained in a three letter word. If the guessed letter is in the word, the program indicates the position of the letter in the word, otherwise the program indicates that the letter is not in the word. Consider the following examples,   |  |  | | --- | --- | | String word = “cat”; | | | **User guess** | **Output** | | B | Not in the word | | A | \_ a \_ | | G | Not in the word | | t | \_ \_ t | | c | c \_ \_ |   Notice in the above example, the word to guess is all lower case and contains only three letters. Also notice, the user can provide either upper or lower case letters.  You need not write code to evaluate all the possible guesses – you only need to write code to evaluate one guess only. Write the HangMan class below for one guess only. | |
| public class HangMan{  public static void main(String args[]){  **String word = "cat";**  **String letters = "\_ \_ \_";**  **String guess;**  **Scanner s = new Scanner(System.in);**  **System.out.println("Guess a letter");**  **guess = s.next();**  **guess = guess.toLowerCase();**  **if(guess.equals(word.substring(0,1))){**  **System.out.println(guess + " \_ " + " \_ ");**  **}else if(guess.equals(word.substring(1, 2))){**  **System.out.println(" \_ " + guess + " \_ ");**  **}else if(guess.equals(word.substring(2))){**  **System.out.println(" \_ " + " \_ " + guess);**  **}else{**  **System.out.println("Not in word");**  **}**  }  } | |
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