Pseudocode

**Part A:** Convert the following pseudocode into Java source code.

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|  | **pseudocode** | **Java** |
| 1 | A = 5  B = 10  if A < B then  output A, " is less than ", B  else  output A, " is greater than ", B  end if |  |
| 2 | STR1 = "red"  STR2 = "blue"  if NOT STR1 = STR2 then  STR1 = "blue"  end if  output STR1 |  |
| 3 | COUNT = 0  loop while COUNT < 20  output COUNT  COUNT = COUNT + 2  end loop |  |
| 4 | COUNT = 0  SUM = 0  loop until COUNT = 10  SUM = SUM + COUNT  COUNT = COUNT + 1  end loop |  |
| 5 | loop X from 1 to 10  if X mod 2 = 0 then  output "even"  else  output "odd"  end if  end loop |  |
| 6 | loop X from 0 to ARRAY.length - 1  if ARRAY[X] > ARRAY[X + 1] then  TEMP = ARRAY[X + 1]  ARRAY[X + 1] = ARRAY[X]  ARRAY[X] = TEMP  end if  end loop |  |

**Part B:** Convert the following flowcharts into pseudocode.

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|  | **flowchart** | **pseudocode** |
| 7 |  |  |
| 8 |  |  |
| 9 |  |  |

**Part C**: Write pseudocode for the following problems.

10. Determine if two numbers are equal. If they are equal print "same" otherwise print "different".

11. A method returns true if a given string contains the letter "a" otherwise it returns false.

12. A method returns true if a given number is prime otherwise it returns false. A number is prime if it  
 is only divisible by itself and one.