1. What gets printed by the following code fragment?

```java
int num1 = 4; int num2 = 3;
if (num1 + num2 < 9)
{
    System.out.println("red");
    System.out.println("orange");
}
else
    System.out.println("white");
if (num1 >= num2)
    System.out.println("beige");
else if ((num1 + 10) >= num2)
    {
        System.out.println("black");
        System.out.println("blue");
    }
else
    System.out.println("yellow");
System.out.println("green");
```

Output

```
red
orange
beige
green
```

2. The following code is supposed to compute and print the maximum of three variables a, b, c, but it does not work. Provide an example of values of a, b, c for which it gives the wrong answer and show how to correct it by making a couple of small changes (i.e., do NOT rewrite all of it).

```java
if (a > b)
    if (b > c) // should be: if (a > c)
    max = a;
    else
        max = c;
else
    if (b > a) // should be: if (b > c)
        max = b;
    else
        max = c;
System.out.println("max = " + max);
```

It does not work for values a > c > b
It also does not work for c > b > a
1. What gets printed by the following code fragment?

```java
int num1 = 5; int num2 = 16;

if (num1 + num2 < 9)
{
    System.out.println("green");
    System.out.println("red");
}
else
    System.out.println("white");
if (num1 >= num2)
    System.out.println("beige");
else
    if ((num1 + 10) >= num2)
    {
        System.out.println("black");
        System.out.println("blue");
    }
    else
        System.out.print("yellow");
    System.out.println("brown");
```

2. Complete the following algorithm to print the \textit{minimum} of three numbers a, b, c.

\textbf{Variables:} a, b, c, min

\textbf{Algorithm:}
\begin{itemize}
  \item input a, b, c  
  \item \textbf{min} = a  
  \item if b < \textbf{min}
      \begin{itemize}
        \item \textbf{min} = b
      \end{itemize}
  \item if c < \textbf{min}
      \begin{itemize}
        \item \textbf{min} = c
      \end{itemize}
  \item print \textbf{min}
\end{itemize}

// NB: there are many possible correct answers