(a) List the three kinds of Java inner class and say which of the three is used in the following program. [4 marks]

    public class Trial
    { private boolean b = true;

        private Trial()
        { (new ClassIn()).test();
            this.b = false;
        }

        public static void main(String args [])
        { new Trial();
        }

        private class ClassIn
        { ClassIn()
            { boolean b = false;
                }

            private void test()
            { if (this.b)
                System.out.println("Yes");
                else
                System.out.println("No");
            }
        }
    }

(b) The javac compiler complains about the condition in the if-statement. What is the complaint? Show two ways in which the condition may be fixed. [4 marks]

(c) With either of these corrections the program will compile and run in the same way. Explain what happens at run-time and, in particular, show what output is printed. [6 marks]

(d) Rearrange the code so that class ClassIn is a local class within the constructor Trial(). The program as a whole should perform as before. [6 marks]