Lab Assignments – VIII
MCA Semester III
CG and Java Lab (CS3307)

1. Create a class named A, with a private inner class B. Create variables of each of the four access specifiers in both the classes, and check which variables in A are accessible from B, and vice-versa, both directly and via creating objects.

2. Now, make the inner class B as public. From main method in another class Main, create an object of the inner class B. Which variables of B are accessible to Main class? Next place A and Main in two different packages, and test the same. Now, make B as static. How will you create an object of B in Main?

3. Place A in a package named *inst.nitjsr.test.pkg1* and make B as protected. Put a method named *m1()* in B, that will print "From within inner class B". In another package *inst.nitjsr.test.pkg2,* create Main class, and inside main method, create an anonymous inner class extending A. In that class, in a method named *m2()* create an object of B, and invoke m1 of that object. Now, invoke m2 of the created anonymous object. Will it work as expected? [Note: Create the subdirectories yourself, and make sure the .class files stay at the same location as the corresponding .java files]

4. Create the packages in problem 3 in another way. If your assignment directory is *proj,* within proj, create two subdirectories *bin* and *src.* Keep your java files in src subdirectory, without any package subdirectory structure [the package statement should remain in the java files], i.e., the path to the java files must be *src/A.java* and *src/Main.java* [change slash type on Windows]. The class files must get created in the bin subdirectory with proper package subdirectory structure. Mention the commands you have used as well.

5. Read two integers from console using *BufferedReader,* where the integers are given on same line separated by a single space, i.e., *23 49*. Output their sum.