

**GLS University**  
**Faculty of Computer Applications and Information Technology**  
**BCA SEM III**  
**Core Java**

**Practical Assignment – 3**

1. Write a Java program to create a class called Shape with a method called getArea. Create a subclass called Rectangle that overrides the getArea() method to calculate the area of a rectangle. (Value should be taken from User)
2. Write a Java program to create a class known as Person with methods called getFirstName() and getLastName(). Create a subclass called Employee that adds a new method named getEmployeeId() and overrides the getLastName() method to include the employee's job title. (Value Should be taken from User).
3. Write a program in Java in which a subclass constructor invokes the constructor of the super class and instantiate the values.
4. Describe abstract class called Shape which has three subclasses say Triangle, Rectangle, Circle. Define one method area() in the abstract class and override this area() in these three subclasses to calculate for specific object i.e. area() of Triangle subclass should calculate area of triangle etc. Same for Rectangle and Circle.
5. Create a package named MyPackage which consists a class named Student which stores information like the roll number, first name, middle name, last name, address and age of the student. The class should also contain appropriate get and set methods.
6. Write a Java Program to demonstrate all methods of string buffer class.
7. Write a Java Program to demonstrate all methods of string class.
8. Write a Java Program to demonstrate converting primitive data types into wrapper objects. (Autoboxing)
9. Write a Java Program which will read a string and rewrite it in the alphabetical order e.g. The word "STRING" should be written as "GINRST".
10. Write a Program based on package. Create package P1 to perform following task.  
Read the student name and roll no  
Read the student 3 subject marks  
Find the total and percentages.  
Create appropriate method to perform the same and execute the package.
11. Write a Program based on package. Create package P1 and P2 to perform following task.  
P1 package will accept the customer accno and name.  
P2 package will have following methods.  
Deposit amount  
Withdraw amount  
Check Balance