8. Develop a JAVA program to create an outer class with a function display. Create another class inside the outer class named inner with a function called display and call the two functions in the main class.

Save Filename As: InnerOuter.java

Solution:-

```
class Outer
{
void display()
{
System.out.println("Outer display");
}
class Inner
{
void display()
{
System.out.println("Inner display");
}
}
}
public class InnerOuter
{
public static void main(String[] args)
{
Outer outer = new Outer();
Outer.Inner inner = outer.newInner();
outer.display(); // Calls the outer class display()
function
inner.display(); // Calls the inner class display()
function
}
```

}

9. Develop a JAVA program to raise a custom exception (user defined exception) for DivisionByZero using try, catch, throw and finally

Save Filename As: CustomException.java

Solution:-

```
// Custom Exception Class
class DivisionByZeroException extends Exception
{
public DivisionByZeroException (String message) { super
(message); }
}
public class CustomException
{
public static void main (String[] args)
{
int dividend = 10;
int divisor = 0;
try
{
if (divisor == 0)
{
throw new DivisionByZeroException("Cannot divide
by zero");
}
int result = dividend / divisor;
System.out.println ("Result: " + result);
}
catch (DivisionByZeroException e)
{
System.out.println ("Exception: " + e.getMessage ());
}
finally
```

```
{
System.out.println ("Finally block executed");
}
}
}
```