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|  | *Shahid Smarak College* |

*Kathmandu, kirtipur – 10*

*Lab Report of OOP in JAVA*

Submitted by: -

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BCA 3rd Semester

Submitted to: -

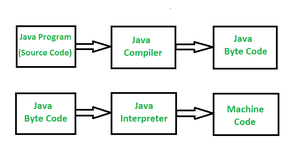
Department of BCA.

Introduction

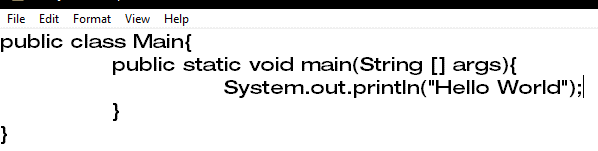
Java is an object-oriented programming language developed by sun Microsystem of USA in 1991. Java is purely object oriented.

It was originally named ‘Oak’ by James Goslin. (One of the inventers of java.)

Java is compiled into the bytecode and then it is interpreted to machine code.



Basic Structure of a Java program



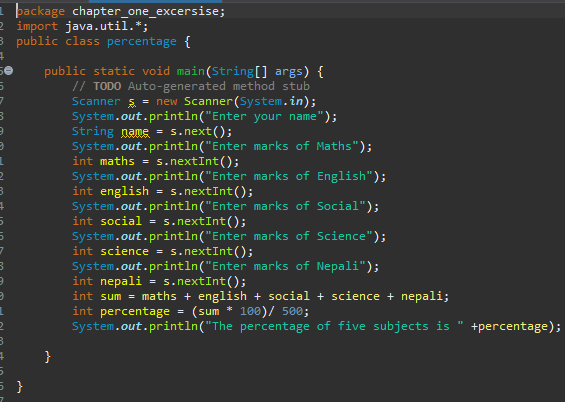
Output



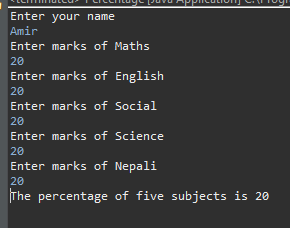
Lab 1

Variables and Data types

Program



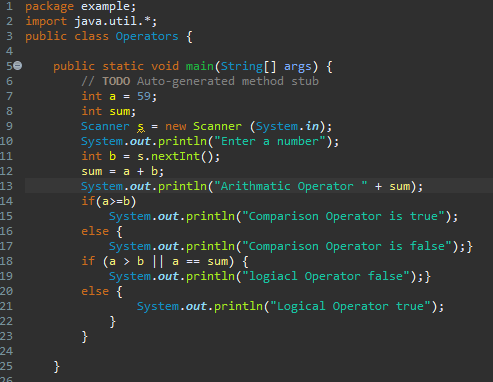
Output



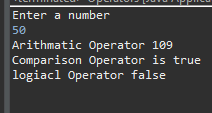
Lab 2

Operators and Expressions

Program



Output



Lab 3

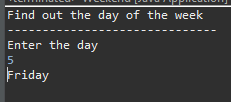
Control Statements

1. Decision Making Statements

Program

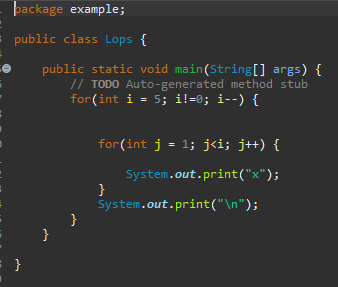


Output



1. Loop Statements

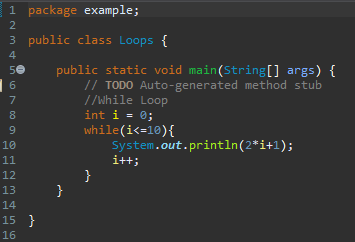
Program



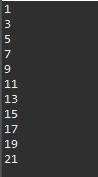
Output



Program



Output

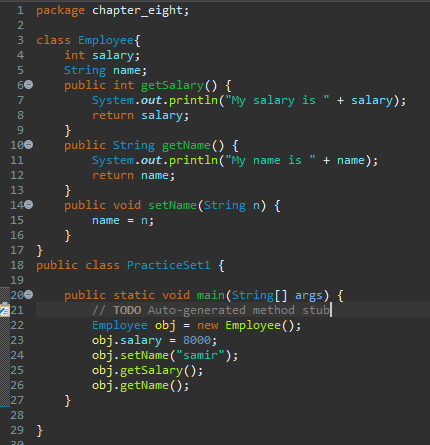


Lab 4

Object Oriented Programming Concepts

Program

A simple class, creating class instances, adding methods to a class, calling function/methods

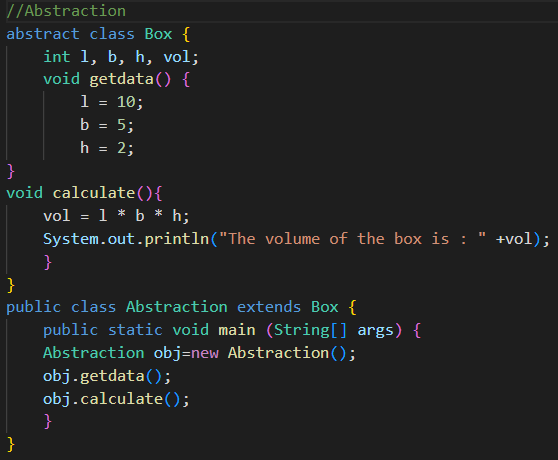


Output

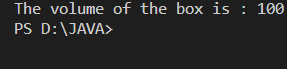


Program

Abstractions

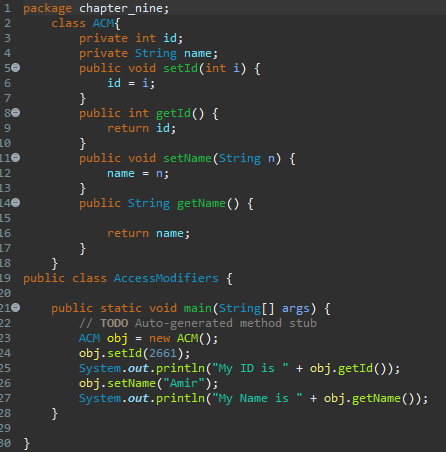


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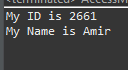


Program

Encapsulations

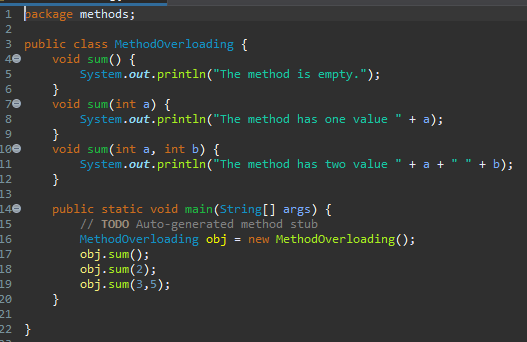


Output



Program

Polymorphism



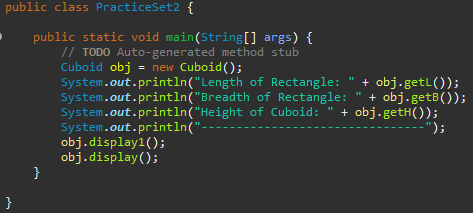
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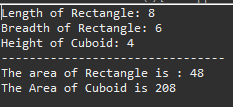
Lab 5

Inheritance, Constructor, super, extends



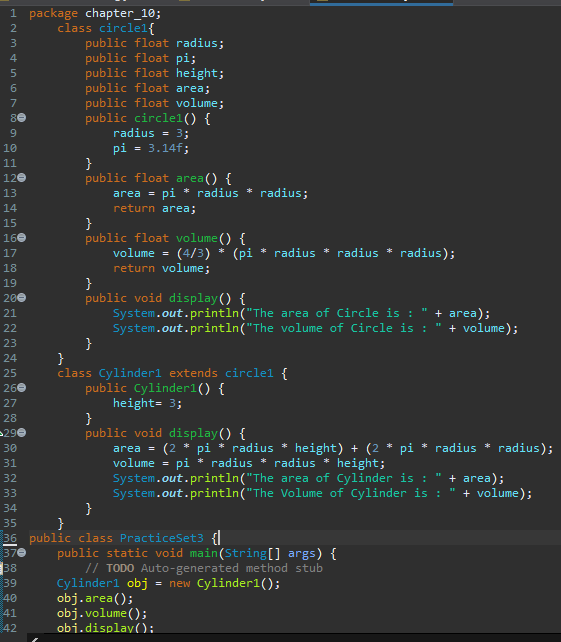


Output



Method Overriding

Program

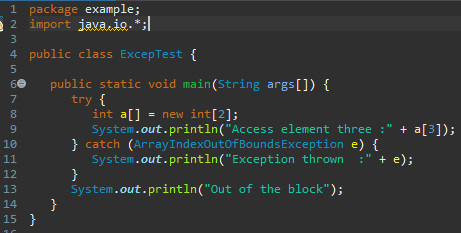


Output

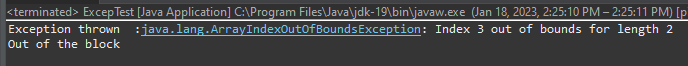


Lab 6

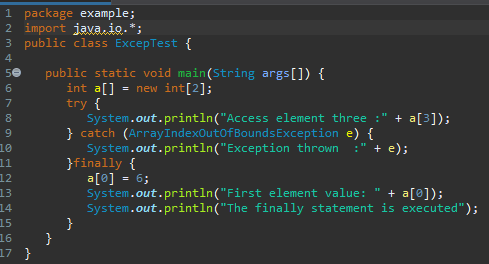
Handling errors / Exceptions



Output



Program



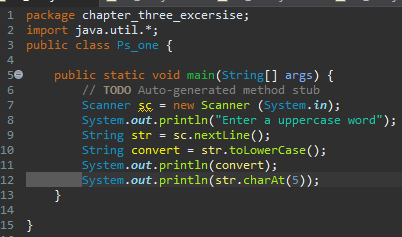
Output



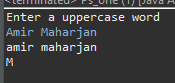
Lab 7

Handling Strings

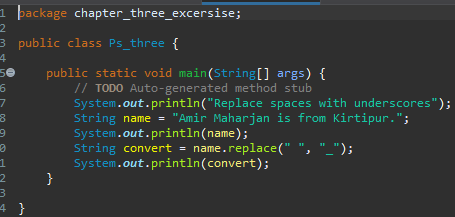
Program



Output



Program



Output



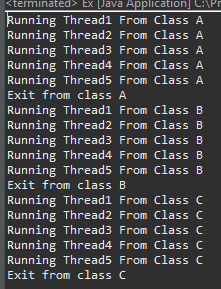
Lab 8

Threads

Programs



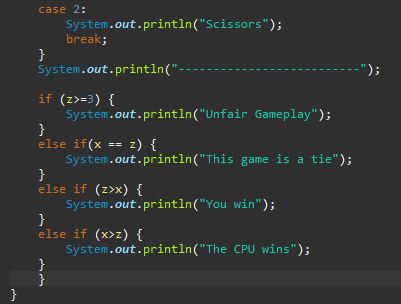
Output



A Game of Rock, paper, scissors

Program





Output.

