**Java Practice**

* **Java Overview/review**: (27)

1. Nested if:

if (){

condition success;

if() {

condition1 success;

} else {

condition1 fail;

}

condition fail;

}

1. personName.length(): length of characters
2. x == y equals

x != y not equal

x < y

x > y

x <= y

x >= y

!(x < y) reverse/NOT

(3 == 3) && (4 == 4) both: True; either: False

(3 == 3) || (3 == 4) both: True; either: False

boolean haveNegative = ((x < 0) || (y < 0) || (z < 0));

or

Boolean haveNegative = false;

haveNegative && AllNegative

1. JOptionPane.showMessageDialog(“Message”, “Error”, JOptionPane.ERROR\_MESSAGE);

System.exit(1);

Input.equals(“truck”);

1. String faculty = null (to avoid confusing Java is String variable is empty
2. switch() {

case 1:

condition;

break;

default:

System.out.println(“Error message”);

System.exit(1);

}

1. switch(){

case 1:

case 2:

case 3

System.out.println(“message”);

break;

default:

System.out.println(“Error message”);

break;

}

1. a
2. b
3. c
4. d
5. e
6. f
7. g
8. h
9. **Decimal Format:**

import java.text.DecimalFormat

**Same data type, multiple variables?**

double regularPay, overtimePay;

1. number = number +1; same number++;

%d: find, print value Integers

%.2f: find, print values Double

1. do {

} while (price > 0.0); //execute loop, then test conditions

* **File I/O**: (7)

1. import java.io.IOException;

import java.io.PrintWriter;

import java.io.File;

public static void main (String[] args) throws IOException

PrintWriter output = new PrintWriter(new File(“Hello.out”));

output.println(“”);

output.close();

1. String fileName = input.next(); (Scanner prev insert)

PrintWriter output = new PrintWriter(new File(fileName));

do {

output.printf(“%.2f %.2f\n”, radius, MathPi \* radius \* radius); (SOP prev insert)

} while (radius > 0.0) ;

%.2f: float, 2 decimal pts precision after decimal

1. for(int i = 0; i <= 10; i++){

}

AddNumbersFromFile

numbers input

horizontal

vertical

//error in opening file

//print o/p inside existing file

1. Sentinel, 0 condition: number != 0;

* **Methods**: (12)

1. Method call: showNumberInfo(int num);
2. –
3. -
4. Square root: Math.sqrt(num)

Random:

import java.util.Random;

Random randGen = new Random();

int randomNumber = randGen.nextInt();

* **Classes**: (6)

Convert to decimal: 1.0 \* (a/b);

* **Collections**: (6)
* **Java Applets with Swing**: (11)
* **Recursion**: (3)
* **Inheritance**:
* **Linked Lists**: (2)
* **Searching and Sorting**: (1)
* **Internet Programming code highlights**:

1. Arrays:

Student[] studentArray = new Student[4];

studentArray[1] = new GradStudent("Devayan Mandal" "11" "MS in CS");

System.out.println(studentArray[i]); //toString() representation

1. ArrayList:

import java.util.ArrayList;

ArrayList students = new ArrayList();

1. List Iterator:

import java.util.ListIterator;

ListIterator li;

li = students.listIterator();

1. TreeSet:

import java.util.TreeSet;

TreeSet students = new TreeSet();

--------------------------------------------------------------------

Note: && happens before ||

//learn invalid text entry code

AgeComparedToJava

//learn user-input: 'yes' or 'no' all variants

AgeComparedToJava

//Rounding-off ("##")

NoInterestLoan:

int numberOfPayments = loan / monthlyPayment;

//System.exit(1) or ERROR for JOptionPane

//Checking if user input is valid or not, returning to start if not

NameAndTown