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**Class:** CSE\_1310\_007.

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**Task 1 (10 pts.)**

public class Pointers2D

{

public static double[][] foo(double[] x)

{

double[][] result = new double[2][];

result[0] = x;

result[1] = x;

for (int i = 0; i < x.length / 2; i++)

{

double temp = result[0][i];

result[0][i] = result[0][x.length-i-1];

result[0][x.length-i-1] = temp;

}

return result;

}

public static void printDoubleMatrix(double[][] a)

{

for (int i = 0; i < a.length; i++)

{

for (int j = 0; j < a[i].length; j++)

{

System.out.printf("%7.1f", a[i][j]);

}

System.out.printf("\n");

}

System.out.printf("\n");

}

public static void printDoubleArray(double[] a)

{

for (int i = 0; i < a.length; i++)

{

System.out.printf("%7.1f", a[i]);

}

System.out.printf("\n");

}

public static void main(String[] args)

{

double[] a = {1.1, 2.2, 3.3, 4.4};

double[][] b = foo(a);

printDoubleArray(a);

printDoubleMatrix(b);

}

}

If I execute this program, it will print out

4.4 3.3 2.2 1.1

4.4 3.3 2.2 1.1

4.4 3.3 2.2 1.1

**Task 2 (10 pts.)**

import java.util.\*;

public class ArrayLists

{

public static void foo(ArrayList<String> a, String b)

{

a.add(a.size()/2, b.substring(0, b.length()/2));

}

public static void main(String[] args)

{

ArrayList<String> x = new ArrayList<String>();

foo(x, "Dallas");

foo(x, "Chicago");

foo(x, "New York");

foo(x, "Denver");

System.out.println(x);

}

}

[Chi, Den, New, Dal]

If I execute this program, it will print out

**Task 3 (10 pts.)**

import java.util.\*;

public class ArrayLists2D

{

public static ArrayList<ArrayList<String>> foo(String b)

{

ArrayList<ArrayList<String>> result = new ArrayList<ArrayList<String>>();

for (int i = 0; i < b.length(); i++)

{

ArrayList<String> current = new ArrayList<String>();

result.add(current);

for (int j = 0; j <= i; j++)

{

current.add(b.substring(0, j+1));

}

}

return result;

}

public static void main(String[] args)

{

ArrayList<ArrayList<String>> x = foo("Texas");

System.out.println(x);

}

}

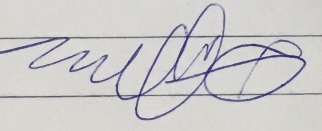
If I execute this program, it will print out

[[T], [T, Te], [T, Te, Tex], [T, Te, Tex, Texa], [T, Te, Tex, Texa, Texas]]

I pledge, on my honor, to uphold UT Arlington's tradition of academic integrity, a tradition that values hard work and honest effort in the pursuit of academic excellence.

I promise that I will submit only work that I personally create or that I contribute to group collaborations, and I will appropriately reference any work from other sources. I will follow the highest standards of integrity and uphold the spirit of the Honor Code.

Student’s signature.



Gia Dao