**Assignment 3.6**

**Problem Statement 1:**

Can you overload a method with same return type? Explain your answer with proper logic.

**Solution:**

The method should be overloaded with the same return type in order to avoid ambiguity.

For example,

class A{

static int add(int a, int b)

{ return a+b; }

static double add(int a, int b)

{ return a+b; } }

class B

{ public static void main (String[] args) {

System.out.println(Adder.add(11,11));

}}

In this when code is compiled it will show error as:

Overloading3.java:3: error: method add (int, int) is already defined in class A static double add (int a, int b) {return a+b;}

To overcome this problem method should be overloaded with the same return type.

**Problem Statement 2:**

Write a program in java using Arrays that sorts the element in descending order.

**Program:**

import java.util.Arrays;

import java.util.Scanner;

public class acad {

public static void main(String[] args){

Scanner sc=new Scanner(System.in);

int n = sc.nextInt(); //size of array

int [] arr =new int[n];

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

{

arr [i] = sc.nextInt();

}

Arrays.sort(arr);

for (int I = arr.length-1 ; I > = 0 ; i--)

{

System.out.print(arr[i]+" ");

}

}}