CSE 1115 Object Oriented Programming

Class Test 1(A)

1. Find if there is any error in the following code segment. If yes, then find out and describe the error. If no, then find out the output of the following program.
`class Account{`
`  String name;`
`  double balance;`
 	
`  public Account(String name, double balance) {`
`  this.name = name;`
`  this.balance = balance;`
`  }`
 	
`  void increaseBalance(double amount){`
`  balance += amount;`
`  }`
 	
`  void decreaseBalance(double amount){`
`  if(amount <= balance){`
`  balance -= amount;`
`  }`
`  }`
`}`
 	
`public class Test {`
`  public static void main(String[] args) {`
`  Account account1 = new Account("Sharif", 100);`
`  Account account2 = new Account("Ahmed", 200);`
`  System.out.println(account1.name + " " + account1.balance);`
`  System.out.println(account2.name + " " + account2.balance);`
 	
`  account1.increaseBalance(130);`
`  account1.decreaseBalance(20);`
`  System.out.println(account1.balance + " " + account2.balance);`
 	
`  account2.increaseBalance(500);`
`  account1.decreaseBalance(30);`
`  System.out.println(account1.balance + " " + account2.balance);`
 	
`  }`
`}`
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2. Write a program in Java, having a method name FindDepartment(String ID) which will take a student id of UIU as input/parameter and returns the department of the student. Note that student id of EEE starts with 012, CSE starts with 011 and BBA starts with 111.	3

3. Write a java class named Bike. Bike class should have 2 instance variables: model and price. Create a constructor for Bike class that initializes the instance variables. Also write a member function for Bike class named "printData()". When printData method is called it should output the following: (model)'s price is (price). For example, suppose you created a Bike object with model: CBR and price: 120000. printData () should output "CBR's price is 120000" when called using the bike object. Marks: 1. Create Bike class with all members and constructor. [2] 2. Create and initialize an object of Bike class [2] 3. Call the printData method using the object to print. [3]	7
4. Write a program in java to check if two arrays are equal or not. If they are not equal, find out the number of maximum matched elements. Sample input Arr 1 = 10, 20, 8, 6, 30 Arr 2 = 10, 20, 8, 7, 16 Output 3 elements matched! Arr 1 = 10, 20, 8, 6, 30 Arr 2 = 9, 50, 13, 7, 16 NO elements matched!	4