



North South University

Department of Electrical and Computer Engineering

CSE215: Programming Language II

Assignment – 1

Q1. Take two integers as input from the user. Print all odd numbers that fall within the range of those two integers. For example, if user inputs 40 and 79, you have to print all odd numbers from 40 to 79. (5)

Q2. Take two integer inputs from user and store them in a and b. Now calculate a to the power of b (a^b). **DO NOT USE ANY MATH FUNCTION** (5)

Q3. Take the mathematical series given below:

$$\frac{1}{3} + \frac{1}{9} + \frac{1}{27} + \dots + \frac{1}{3^n}$$

Here user will give the n as input and your job is to calculate the sum of this mathematical series. (5)

Q4. Take 10 characters as input from user. Check if it's a vowel or consonant. If it's a vowel, print "It's a vowel". If it's a consonant, move to the next input. If the user inputs "b" or "z", exit the loop and print "Critical error". Assume user inputs all characters in lowercase. (5)

Q5. Write a program to print out all Armstrong numbers between 1 and 999. If sum of cubes of each digit of the number is equal to the number itself, then the number is called an Armstrong number. (5)

For example, $153 = (1 * 1 * 1) + (5 * 5 * 5) + (3 * 3 * 3)$

Q6. Implement the following UML diagram. Create an object of the class and display all the info of a customer inside main method. Customer can apply for loan or apply for card only if current balance is greater is 2,00,000, so implement the methods accordingly. (15)

Customer
-id: int -name: string -address: string -phone: int -acctno: int -currentbalance: double
+DepositMoney() +WithdrawMoney() +ApplyForLoan() +RequestCard() //Getter and Setter for all global attributes