

## Assignment 10

1. Create an interface "CreditCardInterface" with methods: viewCreditAmount(), useCard(), payCredit() and increaseLimit(). Create a class SilverCardCustomer (name, cardnumber (16 digits), creditAmount - initialized to 0, creditLimit - set to 50,000 ) which implements the above interface. Inherit class GoldCardCustomer from SilverCardCustomer having the same methods but creditLimit of 1,00,000. Create an object of each class and perform operations.
  - i. useCard() method increases the creditAmount by a specific amount upto creditLimit
  - ii. payCredit() reduces the creditAmount by a specific amount.
  - iii. increaseLimit() increases the creditLimit for GoldCardCustomers (only 3 times, not more than 5000Rs. each time)
2. Write a java program that extends interface by another interface.
3. Show the implementation of hybrid inheritance using interface.
4. Write a program to demonstrate divide by 0 exception. Print the exception type occurred using appropriate exception type in catch block using throws keyword. Use finally block as well.
5. Write a program to catch null pointer exception, arithmetic exception and array out of bound exception in a program which divides the current element with the next element and no operation on the last element of array and stores it in new array.