**JAVA Assignment**

**Q1**. Define a class to represent a bank account. It should have following data members:

* + Account number
  + Name of customer
  + Balance
  + Rate of interest
* It should have following methods:
  + To deposit an amount
  + To withdraw an amount, after checking if minimum account balance after withdrawal is Rs. 5000.
  + To get rate of interest
  + To display account details
* Write proper constructors initializing various data members.

**Q2.** Create a String: “A quick brown fox jumps over the lazy dog.”

* + Get the index of character ‘d’.
  + Get the character at index twice the first instance of ‘w’.
  + Get a substring from index 15 to 22.
  + Convert the string to Uppercase.
  + Get the last index of character ‘u’
  + Append ‘in the night’ to the above string.

**Q3.** Write some long text in a file (any paragraph taken from internet). Read the content of file through Java I/O. Create a program to find the frequency of all words. (using collections)

**Q4.** Create a class ATMTransaction with a method named execute**()** which takes String transactionType as parameter.

* Create a class UnsupportedTransactionException.
* In the execute() method use a switch statement to check if transactionType is of: credit, debit, balanceInquiry and pinChange. If the transactionType is other than these 4 types then throw UnsupportedTransactionException.
* Code should effectively handle exception scenario.