Assignments 3 -Package

E xception

1) Write a program to demonstrate the use of try, catch, finally throw and throws keywords and demonstrate the following points in the program.
a) Multiple catch blocks.
b) try-catch-finally combination.
c) try-finally combination.
d) Nested try blocks

2). Write a java application for checking the bank account funds using InsufficientFundsException using user defined exception using throw keword and create a class for CheckingAccount with methods withdraw() and getBalance() Among these withdraw() should throw an InsufficientFundsException.

Collection

1.) Write a java program to do following operations on Array List(Integer)
      a) Add element
      b) Remove a particular element
      c) Modify
      d) View All elements(Use Iterator)
      e) View a Particular element (get())
      f) Sort (Collections.sort)

2) Write a Java menu driven program to perform the following operations- using Array List Create a class called Player with the following instance variable

      Player name
      total run
      no of wicket
      no of matches
      country
      no-of-century
      Category = null

* Create 5 Players add into the Array List
* Display the player details who has scored maximum no of runs
* Sort the players by name
* Remove the player who has scored less than 100 runs
* Update Category 'A' if player has got 10 century else update Grade ' B'

3.Write a java program to do push, pop , display objects on stacks(integer).

4.Implement single linked list(Integer) with following options:
      a. Insert at the beginning.
      b. Insert at given position.
      c. Insert after a given node.
      d. Delete at the beginning.
      e. Delete at given position.
      f. Delete after a given node.
      g. Reverse the linked list.

5) Write a Java program menu driven to perform the following operations using Map

* Create a class called Book with the following instance variable

      name
      price
      author name
      isbn no;
      publication

* Create 5 Objects of book class
* Add all the object in to the Map using key as integer(book id) and value as Book Object
* Display all the map object using for each
* Read any key from the user and display the particular book object based on key
* Reduce the price by 10% for a particular publication books and display all object with reduced price.

6) Write a Java program to simulate an online shopping cart.

A shopping cart is a collection of items selected by a customer for purchase. A user can add items to the cart, remove them, empty the cart, view the items in the cart, view the items in the shop, and end shopping and proceed to checkout.(using arraylist)

File Handling

1) Program to count the number of character, no of word, no of lines in a given file.

2) Java Program to Search for a given word in a File

3) Read source and destination file from the user as an argument. Copy the contents of the source into another destination file in a faster, efficient way.

4) Write a program to serialize the student object(id,name,marks,subject)
   *Write a student object (minimum five) into the file
   * Read the same from the file,
   * Find out result and display the student details along with result.
   * Find out how many no of students passed and failed in a particular
     Subject.
   *Sort the students object based on marks.