**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)

1. Add element
2. Remove a particular element
3. Modify
4. View All elements(Use Iterator)
5. View a Particular element (get() )
6. 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.

2) 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.