LAB-2 → Extra Programs

1.)
```
import java.util.Scanner;
class Player {
  int Id;
  String Name;
  int score[];
  int matches;
  float avg;
  int totalScore;
  Scanner sc = new Scanner(System.in);

Player() {
  Id = 0;
  Name = null;
}

Player(int pId, String pname, int matchesPlayed,
        int run[]) {
  Id = pId;
  Name = pname;
  matches = matchesPlayed;
  score = run;
}

void calcTotalScore() {
  for (int i=0; i< matches; i++) {
    totalScore += score[i];
  }
}

void getPlayerData() {
  System.out.println("Enter the player Id:");
```

```
Id = sc.nextInt();
System.out.println("Enter the player Name:");
Name = sc.next();
System.out.println("Enter the number of
                    matches played :");
matches = sc.nextInt();
score = new int[matches];
for(int i=0; i<matches; i++) {
System.out.println("Enter the score in
                    the match" + (i+1) + ":");
score[i] = sc.nextInt();
totalScore += score[i];
}
}

void printPlayerData() {
System.out.println("Player Id :" + Id);
System.out.println("Player Name :" + Name);
System.out.println("Number of matches played
                    by player :" + matches);
for(int i=0; i<matches; i++){
System.out.println("Score in the match"
                    +(i+1)+":" + score[i]);
}
System.out.println("Averaye score :" +avg);
}

float calcAverage() {
avg = (float) (totalScore / matches);
return avg;
}
}
```

```
public class Main {
    public static void main (String[] args) {
    int score[] = {10,20,30};
    Player p1 = new Player (07, "Dhoni", 5, score);
     p1.calcAverage();
    Player p2 = new Player();
     p2.getPlayerData();
     if( p1.calcAverage() > p2.calcAverage()){
        p1.printPlayerData();
      }
      else {
          p2.printPlayerData();
      }
    }
}
```

2.)

```
import java.util.Scanner;
class Book {
 int i, no_of_pages;
 double year_of_pub;
 float price;
 String bookId;
 String bookTitle;
 String author;
 String publisher;

 void inputData() {
    Scanner sc = new Scanner(System.in);
    System.out.println("Enter the Book Id :");
    bookId = sc.next();
    System.out.println("Enter the title of the
                        Book :");
    bookTitle = sc.next();
    System.out.println("Enter the Author and
                        Publisher of the Book :");
    author = sc.next();
    publisher = sc.next();
    System.out.println("Enter the number of pages
                        in the Book :");
    no_of_pager = sc.next();
    System.out.println("Enter the year of
                        publication of the book :");
    year_of_pub = sc.nextDouble();
    System.out.println("Enter the price of
                        the Book :");
    price = sc.nextFloat();
 }
```

```
void outputData() {
 System.out.println("Book Details :\n");
 System.out.println("Book Id : "+bookId+"\n");
 System.out.println("Book Title: "+booktitle+"\n");
 System.out.println("The Author and Publisher
                    of the Book:"+author+publisher+
                                        "\n");
 System.out.println("The number of pages in the
                    Book:"+no_of_pages+"\n");
 System.out.println("The year of publication
                    of the Book:"+year_of_pub+"\n");
 System.out.println("The price of the Book:"
                    +price+"\n");
}

float expbk() {
  return price;
}
 void bktitle() {
 System.out.println("The most expensive book:"
                    +booktitle+"\n");
 }
  int page() {
  return no_of_pages;
  }
   double year() {
    return year_of_pub;
   }
}
```

```
class BK {
  public static void main (String[] args) {
  int count = 0;
  Book b1 = new Book();
  Book b2 = new Book();
  Book b3 = new Book();
  b1.inputData();
  b2.inputData();
  b3.inputData();
  b1.outputData();
  b2.outputData();
  b3.outputData();
  if ((b1.expbK() > b2.expbK()) &&
                  (b1.expbK() > b3.expbK()))
      b2.bKtitle();
  if ((b3.expbK() > b1.expbK()) &&
                  (b3.expbK() > b2.expbK()))
      b3.bKtitle();

  if (b1.year() == 2020)
      count++;
  if (b2.year() = 2020)
      count++;
  if (b3.year() = 2020)
      count++;
  System.out.println("No. of books published
                  in 2020: " + count + "\n");

  System.out.println("Details of the Book with
                  least pages\n");
```

```
if ((b1.page() < b2.page()) && (b1.page()<b3.page()))
        b1.outputData();
else if ((b2.page() < b1.page()) &&
                        (b2.page()<b3.page()))
        b2.outputData();
 else
        b3.outputData();
    }
}
```