Lab Assignment 3 – Sample Solution

Program 6:

Write a Java program for SoSo rental car company that calculates rental charges. The company charges 17 kd for each day regardless of type of car. The company also charges 0.150 fels for each kilometer driven. The user will enter from the keyboard beginning odometer reading, ending odometer reading, and the number of days the car was rented. Your output should show the following :

>   Beginning odometer reading.
>   Ending odometer reading
>   Total Miles Used.
>   Mile Charges.
>   Number of Days Rented.
>   Days Charges.
>   Total Amount of charges.

Note : the output should be formatted properly, you must use the
      final keyword   in your program

Sample Solution :-

```java
import  java.util.* ;
public class Main {

  final static double chargeDay = 17,chargeKM = 0.150;
  static Scanner console = new Scanner (System.in);
  public static void main(String[] args) {

    double OdoBeg,OdoEnd,Days,TotalMiles,ChargesMile,ChargesDay;
    System.out.println("The function of this Java program " +
        "is to  calculate rental charges for  SOSO rental car company");
    System.out.print("Please Enter the Beginning of Odometer, Ending of Odometer ");
    System.out.println(" and the number of days seperated by spaces: ");

    OdoBeg = console.nextDouble();
    OdoEnd = console.nextDouble();
    Days = console.nextDouble();
    TotalMiles = OdoEnd - OdoBeg;
    ChargesMile = TotalMiles * chargeKM;
    ChargesDay = chargeDay*Days;
    System.out.println("\nBeginning of Odometer =\t"+OdoBeg+"\nEnding of Odometer
=\t"+OdoEnd);
    System.out.println("Total Miles Used:\t"+TotalMiles);
    System.out.println("Mile Charges:\t"+ChargesMile);
    System.out.println("Number of days Rented:\t"+Days);
    System.out.println("Days Charged:\t"+ChargesDay);
    System.out.println("Total Ammount of charges:\t"+(ChargesDay+ChargesMile));
```

Output

```
The function of this Java program is to  calculate rental charges for  SOSO rental car company
Please Enter the Beginning of Odometer, Ending of Odometer  and the number of days
seperated by spaces:
1000 2000 10


Beginning of Odometer =       1000.0
Ending of Odometer =       2000.0
Total Miles Used:       1000.0
Mile Charges:       150.0
Number of days Rented:       10.0
Days Charged:       170.0
Total Amount of charges:       320.0
```

Program 7:

Your found an interesting 7 weeks summer job. Suppose that this job pays 15.500 kd an hour. Suppose that you pay 10% of your pay check for you younger brother. After paying your brother, you spend 15% of the remaining to buy new cloths , and 2.5% buying school supplies. After buying cloths and school supplies, you spend 25% of the remaining to place it in Al-Jowhara account. Your parents contribute 0.500 fels For every 1 kd you place in the account. Write a program that prompts you to enter the pay rate and number of hours worked each week. Your program should output the following :-

> The earned income for 7 weeks before any deductions.
> The younger brother Expenses.
> The Cloths Expenses.
> School Supplies Expenses.
> Al-Jowhara Deposit
> Your Parents Contribution to Al-Jowhara.
> Remaining

Sample Solution :-

```java
import  java.util.* ;
public class Main {
  static Scanner console = new Scanner (System.in);
  public static void main(String[] args) {

  double PR,NoH,Weeks7,Bro,Clothes,School,Jowhara,Parents,Remain;
  System.out.println("The function of this program is to calculate the following ");
  System.out.println("    - The earned income for 7 weeks before any deductions");
  System.out.println("    - 0.10   The younger brother Expenses");
  System.out.println("    - 0.15    The Cloths Expenses. ");
  System.out.println("    - 0.025  School Supplies Expenses. ");
  System.out.println("    - 0.25    Al-Jowhara Deposit ");
  System.out.println("    - 0.50     for every 1 kd - Your Parents Contribution to Al-Jowhara. ");
  System.out.println("    -          Remaining  ");
  System.out.println("Please enter the pay rate and the numbers of hours worked,  ");
  System.out.println(" seperated with space: ");

  PR = console.nextDouble();
  NoH = console.nextDouble();


  Weeks7 = (PR*NoH)*7;
  Bro = (Weeks7/100)*10;
  Clothes = ((Weeks7-Bro)/100)*15;
  School = ((Weeks7-Clothes)/100)*2.5;
  Jowhara = ((Weeks7-School)/100)*25;
  Parents = (Jowhara*0.500);
  Remain = Weeks7-Bro-Clothes-School-Jowhara;
```

System.out.println("7 weeks Eanred income: \t\t\t$"+Weeks7+"\nYounger Brother Expenses: \t\t$"+Bro+
    "\nClothes Expenses: \t\t\t$"+Clothes+"\nSchool Supplies Expenses: \t\t$"+School+
    "\nAl-Jowhara Deposit: \t\t\t$"+Jowhara+"\nParents Contribution to Al-Jowhara: \t$"+Parents+ "\nRemaining: \t\t\t$"+Remain);

Output

The function of this program is to calculate the following ");
   - The earned income for 7 weeks before any deductions");
   - 0.10   The younger brother Expenses");
   - 0.15   The Cloths Expenses. ");
   - 0.025 School Supplies Expenses. ");
   - 0.25   Al-Jowhara Deposit ");
   - 0.50   for every 1 kd - Your Parents Contribution to Al-Jowhara. ");
   -      Remaining ");

Please enter the pay rate and the numbers of hours worked,
 separated with space:
15.5 40
7 weeks Earned income: $4340.0
Younger Brother Expenses: $434.0
Clothes Expenses: $585.9000000000001
School Supplies Expenses: $93.85249999999999
Al-Jowhara Deposit: $1061.536875
Parents Contribution to Al-Jowhara: $530.7684375
Remaining: $2164.7106249999997