EX.NO:2	CURRENCY CONVETER
12-07-19	

AIM:

To generate java application for currency converter,distance converter and time convetrer.

Requirement:

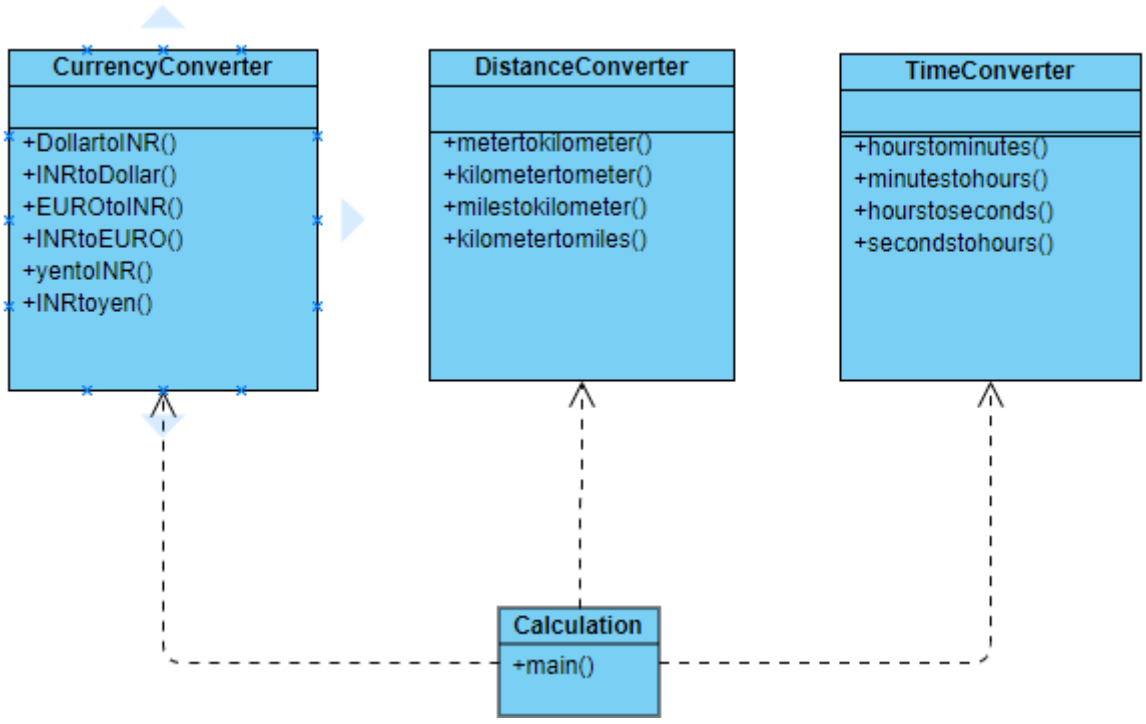
Develop a java application to create package and to create converter application for currency,distance and time converter.

Create a class with main function,create object of converter app get data and dispaly the conversion function.

Alogrithm:

Step1:Declare the packages as conveter library and converter app.
Step2:Declare the class names as currency converter,distance converter and time converter.
Step3:Declare all member functions.
Step4:Create package as converter app and import all the conversion calculation from the converter library package.
Step5:Get the input from the user.
Step6:Calculate the corresponding conversion.
Step7:Display the result.

Class Diagram:



Program:

```
/****
 * program to represent coversion of length,distance,currency
 * developed by
 * mahesh k
 */




package converterlibrary;

public class Currencyconverter {
	public static double DollarToINR(double Dollar)
	{
		double INR;
			INR=Dollar/68.56;
		return INR;
	}
	public static double eUROtoINR(double eURO)
	{
	double INR;
	 INR=eURO*77.39;
	return INR;

	}
	public static double INRtoeURO(double INR)
	{
	double eURO;
	  eURO=INR/77.39;
	return eURO;

	}
	public static double yentoINR(double yen)
	{
	double INR;
	  INR=yen*0.62;
	return INR;

	}
	public static double INRtoyen(double INR)
	{
	double yen;
	  yen=INR/0.62;
	return yen;

	}
	public static double INRtoDollar(double value1) {
```

```
		// TODO Auto-generated method stub
		return 0;
	}
}
/****
 * program to represent coversion of length,distance,currency
 * developed by
 * mahesh k
 */
package converterlibrary;

public class Distanceconverter {
	public static double milesToKM(double miles)
	{
			double KM;
			KM=miles/1.69;
			return KM;
	}
	public static double KMtomiles(double KM)
	{
		double miles;
	  miles=KM*1.69;
	  return miles;
	}
	public static double metertoKM(double meter)
	{
		double KM;
		KM=meter/1000.0;
		return KM;
	}
	public static double KMtometer (double KM)
	{
		double meter;
		meter=KM*1000.0;
		return meter;
	}

}
/****
 * program to represent coversion of length,distance,currency
 * developed by
 * mahesh k
 */
package converterlibrary;

public class Timeconverter {
	public static double hourstominutes(double hours)
	{
	double minutes;
		minutes=hours*60.0;
	return minutes;
	}
```

```
	public static double minuitestohours(double minutes)
	{
	double hours;
		hours=minutes/60.0;
	return hours;
	}
	public static double hourstoSeconds(double hours)
	{
	double Seconds;
		Seconds=hours*3600.0;
	return Seconds;
	}
	public static double Secondstohours(double Seconds)
	{
	double hours;
		hours=Seconds/3600.0;
	return hours;
	}

}
/****
 * program to represnt conversion
 * developed by
 * mahesh k
 */



package Converterapp;
import java.util.Scanner;

import converterlibrary.*;

	public class Calculation1 {
			public static void main (String [] args) {
				double value1,value2;
				int option;
				Scanner sc=new Scanner(System.in);
				while (true)
				{
					System.out.println("1.dollar to INR conversion");
					System.out.println("2.INR to dollar conversion");
					System.out.println("3.eURO to INR conversion");
					System.out.println("4.INR to eURO conversion");
					System.out.println("5.yen to INR conversion");
					System.out.println("6.INR to yen conversion");
					System.out.println("7.meter yo KM conversion");
					System.out.println("8.KM to meter conversion");
					System.out.println("9.miles to KM conversion");
					System.out.println("10.KM to miles conversion");
					System.out.println("11.hours to minuites conversion");
```

```
                                        System.out.println("12.minuites to hours conversion");
                                        System.out.println("13.hours to Seconds conversion");
                                        System.out.println("14.Seconds to hours conversion");
                                        System.out.println("15.Exit");
                                        System.out.println("Enter your choice");
                                        option=sc.nextInt();
                                        switch (option)

                                    }
{
        case 1:
        System.out.print("Enter currency in dollar");
        value1=sc.nextDouble();
        value2=Currencyconverter.DollarToINR(value1);
        System.out.printf("%.2f dollar is equal to %.2f INR .\n",value1,value2);
        break;
        case 2:
        System.out.print("Enter currency in INR");
        value1=sc.nextDouble();
        value2=Currencyconverter.INRtoDollar(value1);
        System.out.printf("%.2f INR is equal to %.2f dollar .\n",value1,value2);
        break;
        case 3:
        System.out.print("Enter currency in eURo");
        value1=sc.nextDouble();
        value2=Currencyconverter.eUROtoINR(value1);
        System.out.printf("%.2f eURO is equal to %.2f INR .\n",value1,value2);
        break;
        case 4:
        System.out.print("Enter currency in INR");
        value1=sc.nextDouble();
        value2=Currencyconverter.INRtoeURO(value1);
        System.out.printf("%.2f INR is equal to %.2f eURO .\n",value1,value2);
        break;
        case 5:
        System.out.print("Enter currency in yen");
        value1=sc.nextDouble();
        value2=Currencyconverter.yentoINR(value1);
        System.out.printf("%.2f yen is equal to %.2f INR .\n",value1,value2);
        break;
        case 6:
        System.out.print("Enter currency in INR");
        value1=sc.nextDouble();
        value2=Currencyconverter.INRtoyen(value1);
        System.out.printf("%.2f INR is equal to %.2f yen .\n",value1,value2);
        break;
        case 7:
        System.out.print("Enter distance in meter");
        value1=sc.nextDouble();
        value2=Distanceconverter.metertoKM(value1);
        System.out.printf("%.2f meter is equal to %.2f KM .\n",value1,value2);
        break;
```

```
case 8:
System.out.print("Enter distance in KM");
value1=sc.nextDouble();
value2=Distanceconverter.KMtometer(value1);
System.out.printf("%.2f KM is equal to %.2f meter .\n",value1,value2);
break;
case 9:
System.out.print("Enter distance in miles");
value1=sc.nextDouble();
value2=Distanceconverter.milesToKM(value1);
System.out.printf("%.2f miles is equal to %.2f KM .\n",value1,value2);
break;
case 10:
System.out.print("Enter distance in KM");
value1=sc.nextDouble();
value2=Distanceconverter.KMtomiles(value1);
System.out.printf("%.2f KM is equal to %.2f miles .\n",value1,value2);
break;
case 11:
System.out.print("Enter time in hours");
value1=sc.nextDouble();
value2=Timeconverter.hourstominutes(value1);
System.out.printf("%.2f hours is equal to %.2f minuites .\n",value1,value2);
break;
case 12:
System.out.print("Enter time in minuites");
value1=sc.nextDouble();
value2=Timeconverter.minuitestohours(value1);
System.out.printf("%.2f minuites is equal to %.2f hours .\n",value1,value2);
break;
case 13:
System.out.print("Enter time in hours");
value1=sc.nextDouble();
value2=Timeconverter.hourstoSeconds(value1);
System.out.printf("%.2f hours is equal to %.2f Seconds .\n",value1,value2);
break;
case 14:
System.out.print("Enter time in Seconds");
value1=sc.nextDouble();
value2=Timeconverter.Secondstohours(value1);
System.out.printf("%.2f Seconds is equal to %.2f hours .\n",value1,value2);
break;
case 15:
System.out.print("Thankyou for using converter app!!");
break;
default:
System.out.print("Please enter a valid number !!!");
}
if(option==15)
{
        break;
}
```

}

Output:

```
1.dollar to INR conversion
2.INR to dollar conversion
3.eURO to INR conversion
4.INR to eURO conversion
5.yen to INR conversion
6.INR to yen conversion
7.meter yo KM conversion
8.KM to meter conversion
9.miles to KM conversion
10.KM to miles conversion
11.hours to minuites conversion
12.minuites to hours conversion
13.hours to Seconds conversion
14.Seconds to hours conversion
15.Exit
Enter your choice
13
Enter time in hours1
1.00 hours is equal to 3600.00 Seconds .
```

Result:

Hence the conversion of distance,currency and time is done in java.