EX.NO: 02	CONVERTER APPLICATION
DATE:12/07/19	

AIM:

To develope a java console application to convert currency with DOLLAR TO INR,INR TO DOLLAR,INR TO EURO,EURO TO INR,YEN TO INR,INR TO YEN display the result.

REQUIREMENT:

Create a class currency converter with the following:

Data member:dollar to inr,inr to dollar,inr to euro,euro to inr,inr to yen,yen to inr.

Member function:Read the value,compute the value,print the value.

ALGORITHM:

STEP 1:Declare a package converter library,converter library.

STEP 2:Declare a class name currency converter,distance converter,time converter.

STEP 3:Declare a constructor with initial attribute.

STEP 4:Declare get data member.

FLOW CHART:

PROGRAM:

```
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 to 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.
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.
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.
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.
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.
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.
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.
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.
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.
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.
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.
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.
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.
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.
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.
System.out.printf("%.2f Seconds is equal to %.2f hours ./n",value1,value2);
break;
case 15:
System.out.print("Thankyou for using converter application!!");
break;
default:
System.out.print("Please enter a valid number !!!");
}
if(option==15)
{
break;
}
}
}

}

package converterlibrary;

public class CurrencyConverter {
public static double dollartoINR(double dollar)
{
double INR;
INR=dollar*68.56;
return INR;
}
public static double INRtodollar(double INR)
{
double dollar;
dollar=INR/68.56;
return dollar;
}
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;
}
}
```

```
package converterlibrary;

public class DistanceConverter {
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;
}
public static double milestoKM(double miles)
{
double KM;
KM=miles*1.609;
return KM;
}
public static double KMtomiles(double KM)
{
double miles;
miles=KM/1.609;
return miles;
}
}
```

```
package converterlibrary;

public class TimeConverter {
public static double hourstominuites(double hours)
{
double minuites;
minuites=hours*60.0;
return minuites;
```

```
}
public static double minuitestohours(double minuites)
{
double hours;
hours=minuites/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;
}
}
```

OUTPUT:

RESULT: