Ex.No:2. Develop a java application to implement currency converter (Dollar to INR, EURO to INR, Yen to INR and vice versa), distance converter (meter to KM, miles to KM and vice versa) , time converter (hours to minutes, seconds and vice versa) using packages.

**PROGRAM**

**currency.java**

package currencyconversion;

import java.util.\*;

public class currency

{

double inr,usd;

double euro,yen;

Scanner in=new Scanner(System.in);

public void dollartorupee()

{

System.out.println("Enter dollars to convert into Rupees:");

usd=in.nextInt();

inr=usd\*74;

System.out.println("Dollar ="+usd+"equal to INR="+inr);

}

public void rupeetodollar()

{

System.out.println("Enter Rupee to convert into Dollars:");

inr=in.nextInt();

usd=inr/74;

System.out.println("Rupee ="+inr+"equal to Dollars="+usd);

}

public void eurotorupee()

{

System.out.println("Enter euro to convert into Rupees:");

euro=in.nextInt();

inr=euro\*79.50;

System.out.println("Euro ="+euro +"equal to INR="+inr);

}

public void rupeetoeuro()

{

System.out.println("Enter Rupees to convert into Euro:");

inr=in.nextInt();

euro=(inr/79.50);

System.out.println("Rupee ="+inr +"equal to Euro="+euro);

}

public void yentorupee()

{

System.out.println("Enter yen to convert into Rupees:");

yen=in.nextInt();

inr=yen\*0.61;

System.out.println("YEN="+yen +"equal to INR="+inr);

}

public void rupeetoyen()

{

System.out.println("Enter Rupees to convert into Yen:");

inr=in.nextInt();

yen=(inr/0.61);

System.out.println("INR="+inr +"equal to YEN"+yen);

}

}

**distance.java**

package distanceconversion;

import java.util.\*;

public class distance

{

double km,m,miles;

Scanner sc = new Scanner(System.in);

public void kmtom()

{

System.out.print("Enter in km ");

km=sc.nextDouble();

m=(km\*1000);

System.out.println(km+"km" +"equal to"+m+"metres");

}

public void mtokm()

{

System.out.print("Enter in meter ");

m=sc.nextDouble();

km=(m/1000);

System.out.println(m+"m" +"equal to"+km+"kilometres");

}

public void milestokm()

{

System.out.print("Enter in miles");

miles=sc.nextDouble();

km=(miles\*1.60934);

System.out.println(miles+"miles" +"equal to"+km+"kilometres");

}

public void kmtomiles()

{

System.out.print("Enter in km");

km=sc.nextDouble();

miles=(km\*0.621371);

System.out.println(km+"km" +"equal to"+miles+"miles");

}

}

**timer.java**

package timeconversion;

import java.util.\*;

public class timer

{

int hours,seconds,minutes;

int input;

Scanner sc = new Scanner(System.in);

public void secondstohours()

{

System.out.print("Enter the number of seconds: ");

input = sc.nextInt();

hours = input / 3600;

minutes = (input % 3600) / 60;

seconds = (input % 3600) % 60;

System.out.println("Hours: " + hours);

System.out.println("Minutes: " + minutes);

System.out.println("Seconds: " + seconds);

}

public void minutestohours()

{

System.out.print("Enter the number of minutes: ");

minutes=sc.nextInt();

hours=minutes/60;

minutes=minutes%60;

System.out.println("Hours: " + hours);

System.out.println("Minutes: " + minutes);

}

public void hourstominutes()

{

System.out.println("enter the no of hours");

hours=sc.nextInt();

minutes=(hours\*60);

System.out.println("Minutes: " + minutes);

}

public void hourstoseconds()

{

System.out.println("enter the no of hours");

hours=sc.nextInt();

seconds=(hours\*3600);

System.out.println("Minutes: " + seconds);

}

}

**converter.java**

import java.util.\*;

import java.io.\*;

import currencyconversion.\*;

import distanceconversion.\*;

import timeconversion.\*;

class converter

{

public static void main(String args[])

{

Scanner s=new Scanner(System.in);

int choice,ch;

currency c=new currency();

distance d=new distance();

timer t=new timer();

do

{

System.out.println("1.dollar to rupee ");

System.out.println("2.rupee to dollar ");

System.out.println("3.Euro to rupee ");

System.out.println("4..rupee to Euro ");

System.out.println("5.Yen to rupee ");

System.out.println("6.Rupee to Yen ");

System.out.println("7.Meter to kilometer ");

System.out.println("8.kilometer to meter ");

System.out.println("9.Miles to kilometer ");

System.out.println("10.kilometer to miles");

System.out.println("11.Hours to Minutes");

System.out.println("12.Hours to Seconds");

System.out.println("13.Seconds to Hours");

System.out.println("14.Minutes to Hours");

System.out.println("Enter ur choice");

choice=s.nextInt();

switch(choice)

{

case 1:

{

c.dollartorupee();

break;

}

case 2:

{

c.rupeetodollar();

break;

}

case 3:

{

c.eurotorupee();

break;

}

case 4:

{

c.rupeetoeuro();

break;

}

case 5:

{c.yentorupee();

break;}

case 6 :

{

c.rupeetoyen();

break;

}

case 7 :

{

d.mtokm();

break;

}

case 8 :

{

d.kmtom();

break;

}

case 9 :

{

d.milestokm();

break;

}

case 10 :

{

d.kmtomiles();

break;

}

case 11 :

{

t.hourstominutes();

break;

}

case 12 :

{

t.hourstoseconds();

break;

}

case 13 :

{

t.secondstohours();

break;

}

case 14 :

{

t.minutestohours();

break;

}}

System.out.println("Enter 0 to quit and 1 to continue ");

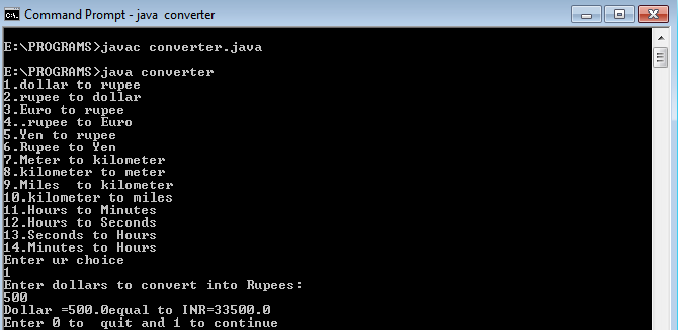
ch=s.nextInt();

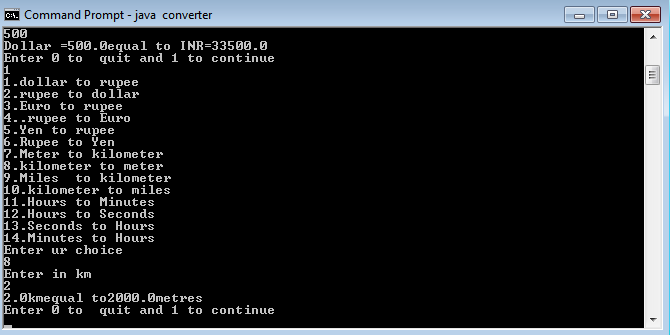
}while(ch==1);

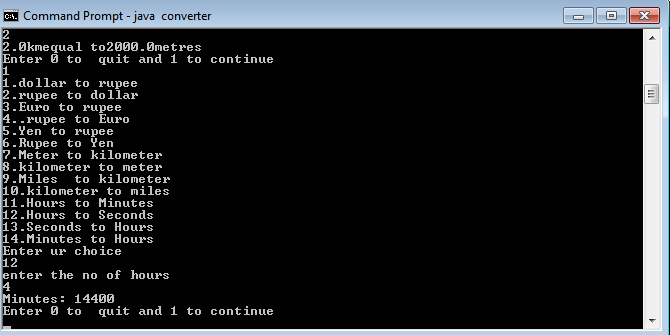
}

}

**OUTPUT**

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