/\*Exercise 6\*/

/\*1.\*/

/\*package Shape\*/

/\*Circle.java\*/

package Shape;

import java.util.\*;

public class Circle

{

public float radius = 1.0f;

public Circle(float radius)

{

this.radius = radius;

}

public float getArea()

{

return (3.14f\*radius\*radius);

}

public float getPerimeter()

{

return (2\*3.14f\*radius);

}

}

/\*Triangle.java\*/

package myPackage;

import java.util.\*;

public class Triangle

{

public float breath = 1.0f;

public float height = 1.0f;

public float len = 1.0f,len1 = 1.0f,len2 = 1.0f;

public Triangle(float breath,float height,float len,float len1,float len2)

{

this.breath = breath;

this.height = height;

this.len = len;

this.len1 = len1;

this.len2 = len2;

}

public float getArea()

{

return 0.5f\*height\*breath;

}

public float getPerimeter()

{

return len+len1+len2;

}

}

/\*Square.java\*/

package Shape;

import java.util.\*;

public class Square

{

float side;

public Square(float side)

{

this.side = side;

}

public float getArea()

{

return (side\*side);

}

public float getPerimeter()

{

return (4\*side);

}

}

/\*main\*/

import Shape.Circle;

import Shape.Rectangle;

import Shape.Square;

import java.util.\*;

class packagemain

{

public static void main(String []args)

{

Scanner input = new Scanner(System.in);

int choice = 0,cont = 0;

do

{

System.out.print("Enter choice 1 : for circle\t2 : for Rectangle\t3 : for Square : ");

choice = input.nextInt();

switch(choice)

{

case 1:{

float radius;

System.out.print("Enter radius : ");

radius = input.nextFloat();

Circle obj = new Circle(radius);

System.out.println("------CIRCLE DETAILS------\n");

System.out.println("Area : "+obj.getArea() + "\nPerimeter : "+obj.getPerimeter());

break;

}

case 2:{

float height,breath,l1,l2,l;

System.out.print("Enter breath : ");

breath = input.nextFloat();

System.out.print("Enter height : ");

height = input.nextFloat();

System.out.print("Enter length1 : ");

l = input.nextFloat();

System.out.print("Enter length2 : ");

l1 = input.nextFloat();

System.out.print("Enter length3 : ");

l2 = input.nextFloat();

Triangle obj = new Triangle(breath,height,l,l1,l2);

System.out.println("------TRIANGLE DETAILS------\n");

System.out.println("Area : "+obj.getArea() + "\nPerimeter : "+obj.getPerimeter());

break;

}

case 3:{

float side;

System.out.print("Enter side : ");

side = input.nextFloat();

Square obj = new Square(side);

System.out.println("------SQUARE DETAILS------\n");

System.out.println("Area : "+obj.getArea() + "\nPerimeter : "+obj.getPerimeter());

break;

}

}

System.out.print("Enter 1 : to continue\t0 : to exit : ");

cont = input.nextInt();

}while(cont !=0);

}

}

/\*

output:

Enter choice 1 : for circle 2 : for Rectangle 3 : for Square : 1

Enter radius : 2

------CIRCLE DETAILS------

Area : 12.56

Perimeter : 12.56

Enter 1 : to continue 0 : to exit : 1

Enter choice 1 : for circle 2 : for Triangle 3 : for Square : 2

Enter breath : 2

Enter height : 3

Enter length1 : 5

Enter length2 : 5

Enter length3 : 5

------TRIANGLE DETAILS------

Area : 3.0

Perimeter : 15.0

Enter 1 : to continue 0 : to exit : 1

Enter choice 1 : for circle 2 : for Triangle 3 : for Square : 3

Enter side : 5

------SQUARE DETAILS------

Area : 25.0

Perimeter : 20.0

Enter 1 : to continue 0 : to exit : 0

\*/

/\*2.\*/

/\*package mypark\*/

/\*CurrencyConverter.java\*/

package mypack;

import java.util.\*;

public class CurrencyConverter

{

public float DTI(float a)

{

return a\*72.33f;

}

public float ETI(float a)

{

return a\*79.13f;

}

public float YTI(float a)

{

return a\*0.68f;

}

public float ITD(float a)

{

return a\*(1/72.33f);

}

public float ITE(float a)

{

return a\*(1/79.13f);

}

public float ITY(float a)

{

return a\*(1/0.68f);

}

}

/\*DistanceConverter.java\*/

package mypack;

import java.util.\*;

public class DistanceConverter

{

public float mtokm(float a)

{

return a/1000;

}

public float milestokm(float a)

{

return a\*1.609f;

}

public float kmtom(float a)

{

return a\*1000;

}

public float kmtomiles(float a)

{

return a\*0.621f;

}

}

/\*TimeConverter.java\*/

package mypack;

import java.util.\*;

public class TimeConverter

{

public float hrtomin(float a)

{

return a\*60;

}

public float mintosec(float a)

{

return a\*60;

}

public float sectomin(float a)

{

return a/60;

}

public float mintohr(float a)

{

return a/60;

}

}

/\*main\*/

import java.util.\*;

import mypack.CurrencyConverter;

import mypack.DistanceConverter;

import mypack.TimeConverter;

class Converter

{

public static void main(String []args)

{

Scanner input = new Scanner(System.in);

int choice,c1,cont,cont1;

do

{

System.out.print("1 : Currency Converter\n2 : Distance Converter\n3 : Time Converter\nEnter your choice : ");

choice = input.nextInt();

switch(choice)

{

case 1:{

CurrencyConverter obj = new CurrencyConverter();

do

{

System.out.print("1 : Dollar to INR\n2 : EURO to INR\n3 : YEN to INR\n4 : INR to Dollar\n5 : INR to EURO\n6 : INR to YEN\nEnter your choice : ");

c1 = input.nextInt();

switch(c1)

{

case 1:{

float a;

System.out.print("Enter the Dollar : ");

a = input.nextFloat();

System.out.println("Dollar to INR : "+obj.DTI(a));

break;

}

case 2:{

float a;

System.out.print("Enter the EURO : ");

a = input.nextFloat();

System.out.println("EURO to INR : "+obj.ETI(a));

break;

}

case 3:{

float a;

System.out.print("Enter the YEN : ");

a = input.nextFloat();

System.out.println("YEN to INR : "+obj.YTI(a));

break;

}

case 4:{

float a;

System.out.print("Enter the INR : ");

a = input.nextFloat();

System.out.println("INR to Dollar : "+obj.ITD(a));

break;

}

case 5:{

float a;

System.out.print("Enter the INR : ");

a = input.nextFloat();

System.out.println("INR to EURO : "+obj.ITE(a));

break;

}

case 6:{

float a;

System.out.print("Enter the INR : ");

a = input.nextFloat();

System.out.println("INR to EURO : "+obj.ITY(a));

break;

}

}

System.out.print("Enter 1 : to continue 0 : to exit : ");

cont1 = input.nextInt();

}while(cont1 !=0);

break;

}

case 2:{

DistanceConverter obj = new DistanceConverter();

do

{

System.out.print("1 : Meter to Kms\n2 : Miles to Kms\n3 : Kms to Meter\n4 : Kms to Miles\nEnter your choice : ");

c1 = input.nextInt();

switch(c1)

{

case 1:{

float a;

System.out.print("Enter the Meter : ");

a = input.nextFloat();

System.out.println("Meter to Kms : "+obj.mtokm(a));

break;

}

case 2:{

float a;

System.out.print("Enter the Miles : ");

a = input.nextFloat();

System.out.println("Miles to Kms : "+obj.milestokm(a));

break;

}

case 3:{

float a;

System.out.print("Enter the Kms : ");

a = input.nextFloat();

System.out.println("Kms to Meter : "+obj.kmtom(a));

break;

}

case 4:{

float a;

System.out.print("Enter the Kms : ");

a = input.nextFloat();

System.out.println("Kms to Miles : "+obj.kmtomiles(a));

break;

}

}

System.out.print("Enter 1 : to continue 0 : to exit : ");

cont1 = input.nextInt();

}while(cont1 !=0);

break;

}

case 3:{

TimeConverter obj = new TimeConverter();

do

{

System.out.print("1 : Hrs to min\n2 : Hrs to Sec\n3 : Min to Hrs\n4 : Sec to Min\nEnter your choice : ");

c1 = input.nextInt();

switch(c1)

{

case 1:{

float a;

System.out.print("Enter the Hours : ");

a = input.nextFloat();

System.out.println("Hrs to min : "+obj.hrtomin(a));

break;

}

case 2:{

float a;

System.out.print("Enter the Hours : ");

a = input.nextFloat();

System.out.println("Hrs to Sec : "+obj.mintosec(a));

break;

}

case 3:{

float a;

System.out.print("Enter the Minutes : ");

a = input.nextFloat();

System.out.println("Min to Hrs : "+obj.mintohr(a));

break;

}

case 4:{

float a;

System.out.print("Enter the Second : ");

a = input.nextFloat();

System.out.println("Sec to Min : "+obj.sectomin(a));

break;

}

}

System.out.print("Enter 1 : to continue 0 : to exit : ");

cont1 = input.nextInt();

}while(cont1 !=0);

break;

}

}

System.out.print("Enter 1 : to continue 0 : to exit : ");

cont = input.nextInt();

}while(cont!=0);

}

}

/\*

output :

1 : Currency Converter

2 : Distance Converter

3 : Time Converter

Enter your choice : 1

1 : Dollar to INR

2 : EURO to INR

3 : YEN to INR

4 : INR to Dollar

5 : INR to EURO

6 : INR to YEN

Enter your choice : 1

Enter the Dollar : 5

Dollar to INR : 361.65002

Enter 1 : to continue 0 : to exit : 1

1 : Dollar to INR

2 : EURO to INR

3 : YEN to INR

4 : INR to Dollar

5 : INR to EURO

6 : INR to YEN

Enter your choice : 4

Enter the INR : 500

INR to Dollar : 6.9127607

Enter 1 : to continue 0 : to exit : 0

Enter 1 : to continue 0 : to exit : 1

1 : Currency Converter

2 : Distance Converter

3 : Time Converter

Enter your choice : 2

1 : Meter to Kms

2 : Miles to Kms

3 : Kms to Meter

4 : Kms to Miles

Enter your choice : 1

Enter the Meter : 8

Meter to Kms : 0.008

Enter 1 : to continue 0 : to exit : 1

1 : Meter to Kms

2 : Miles to Kms

3 : Kms to Meter

4 : Kms to Miles

Enter your choice : 4

Enter the Kms : 2

Kms to Miles : 1.242

Enter 1 : to continue 0 : to exit : 1

1 : Meter to Kms

2 : Miles to Kms

3 : Kms to Meter

4 : Kms to Miles

Enter your choice : 2

Enter the Miles : 1

Miles to Kms : 1.609

Enter 1 : to continue 0 : to exit : 0

Enter 1 : to continue 0 : to exit : 1

1 : Currency Converter

2 : Distance Converter

3 : Time Converter

Enter your choice : 3

1 : Hrs to min

2 : Hrs to Sec

3 : Min to Hrs

4 : Sec to Min

Enter your choice : 1

Enter the Hours : 5

Hrs to min : 300.0

Enter 1 : to continue 0 : to exit : 1

1 : Hrs to min

2 : Hrs to Sec

3 : Min to Hrs

4 : Sec to Min

Enter your choice : 4

Enter the Second : 600

Sec to Min : 10.0

Enter 1 : to continue 0 : to exit : 0

Enter 1 : to continue 0 : to exit : 0

\*/