***6. Write a program in java to assign two number 1273 and 58 in a suitable variable. Find its sum, difference, product, quotient and remainder. Display all values with proper message.  
  
class calculation  
{  
public static void main(String args[])  
{  
int a=1273;  
int b=58;  
int sum=a+b;  
int diff=a-b;  
int prod=a\*b;  
int quo=a/b;  
int rem=a%b;  
  
System.out.println("First Number = "+a);  
System.out.println("Second Number = "+b);  
System.out.println("Sum of the Numbers = "+sum);  
System.out.println("Difference of the Numbers = "+diff);  
System.out.println("Product of the Numbers = "+prod);  
System.out.println("Quotient of the Numbers = "+quo);  
System.out.println("Remainder of the Numbers = "+rem);  
}  
}  
  
7. Write a program in java to assign 5769 in a variable. Find and display  
i) Double the Number  
ii) Half the Number  
iii) 2/7 of the number  
  
class compute  
{  
public static void main(String args[])  
{  
int a=5769;  
int d=a\*2;  
double h=(1/2.0d)\*a;  
double f=(2/7.0)\*a;  
  
System.out.println("Number = "+a);  
System.out.println("Double the Number = "+d);  
System.out.println("Half the number = "+h);  
System.out.println("2/7 of the number = "+f);  
}  
}  
  
8. A shopkeeper buys a TV set for Rs. 32,500 and sells it at a profit of 15 %. Apart from this a GST of 18.5% and Service Charge is 1.07% is charged. Display total selling price, profit along with GST and service charge.  
  
class television  
{  
public static void main(String args[])  
{  
int cp=32500;  
float p=(15/100.0f)\*cp;  
float sp=cp+p;  
float gst=(18.5/100.0f)\*sp;  
float sc=(1.07/100.0f)\*sp;  
float tsp=sp+ gst +sc;  
  
System.out.println("Cost Price = "+cp);  
System.out.println("Profit = "+p);  
System.out.println("Selling Price = "+sp);  
System.out.println("GST @ 18.5 % = "+gst);  
System.out.println("Service Charge @ 1.07 % = "+sc);  
System.out.println("Total Selling Price = "+tsp);  
}  
}  
  
  
9. Pankaj purchased an old cycle for Rs. 1200 and spend Rs. 250 on repairs, Rs. 350 in coloring and added new accessories worth Rs. 500.Pankaj wants to make a profit of Rs. 1500 on selling the cycle. Find the selling price of the cycle. Write a java program to store all values and calculate and display the selling price and profit percent of the cycle.  
  
class cycle  
{  
public static void main(String args[])  
{  
int cp=1200, r=250,c=350,a=500,p=1500;  
int tcp=cp+r+c+a;  
int sp=tcp+p;  
double pp = (p\*100.0d)/tcp;  
  
System.out.println("Total Cost Price = "+tcp);  
System.out.println("Selling Price = "+sp);  
System.out.println("Profit % = "+pp);  
}  
}***

***10. A train covers 120.5 km in 2.3 hours, next 160.75 km in 3.5 hours and the last 140.9 km in 5.5 hours. Write a java program to store all values and calculate and display average speed.  
  
class distance  
{  
public static void main(String args[])  
{  
float d1=120.5f, d2=160.75f, d3=140.9f;  
float t1=2.3f , t2=3.5f, t3=5.5f;  
  
float td=d1+d2+d3;  
float tt=t1+t2+t3;  
  
float as = td/tt;  
  
System.out.println("Average Speed = "+as);  
}  
}  
  
11.An alloy consists of 13 parts of copper and 7 parts of zinc and 5 parts of nickel. What is the percentage of each metal in the alloy? Write a java program to store all values and calculate and display the percentage of each metal.  
  
class alloy  
{  
public static void main(String args[])  
{  
int c=13,z=7,n=5;  
int sum =c+z+n;  
  
float pc= (c\*100.0f)/sum;  
float pz= (z\*100.0f)/sum;  
float pn= (n\*100.0f)/sum;  
  
System.out.println("Percentage of Copper in Alloy = "+pc);  
System.out.println("Percentage of Zinc in Alloy = "+pz);  
System.out.println("Percentage of Nickel in Alloy = "+pn);  
}  
}  
  
12. A salesperson sells goods worth Rs. 4325.00, Rs. 4996.50, Rs. 8935.50 and Rs. 9960.75 in four months. Write a program to store the above values and calculate and display total and average sales.  
  
class average  
{  
public static void main(String args[])  
{  
double s1=4325.0d, s2=4996.5d, s3=8935.5d,s4=9960.75d;  
  
double tot = s1+s2+s3+s4;  
double avg = tot/4.0d;  
  
System.out.println("Total Sales = "+tot);  
System.out.println("Average Sales = "+avg);  
}  
}  
  
13. The average height of 8 boys is 157 cm. When the ninth boy joins the group the average height changes to 158 cm. Find the height of the ninth boy in the group. Write a program to store the above data and find and display the height of the ninth boy.  
  
class height  
{  
public static void main(String args[])  
{  
int avg8=157, avg9=158;  
int tot8=avg8 \* 8;  
int tot9=avg9 \* 9;  
int h9=tot9 -tot8;  
  
System.out.println("Height of Ninth Boy = "+h9+" cm");  
}  
}  
  
  
14. The angles of a quadrilateral are in the ratio 14 : 6 : 8 : 10. Write a program to store the given ratio. Find and display each angle of the quadrilateral.  
  
class quad  
{  
public static void main(String args[])  
{  
int a=14,b=6,c=8,d=10;  
int tot=a+b+c+d;  
  
double s1 =(a\*360.0)/tot;  
double s2 =(b\*360.0)/tot;  
double s3 =(c\*360.0)/tot;  
double s4 =(d\*360.0)/tot;  
  
System.out.println("First Angle = "+s1);  
System.out.println("Second Angle = "+s2);  
System.out.println("Third Angle = "+s3);  
System.out.println("Fourth Angle = "+s4);  
}  
}***

***15. Write a program in java to input/enter two numbers. Find and display its sum, difference, product, quotient and remainder.  
  
import java.io.\*;  
  
class cal  
{  
public static void main(String[] args)  
{  
DataInputStream in = new DataInputStream(System.in);  
  
int a, b, sum, diff, prod, quo, rem;  
sum=diff=prod=quo=rem=0;  
  
try  
{  
System.out.print("Enter First Number : ");  
a = Integer.parseInt(in.readLine());//int input  
System.out.print("Enter Second Number : ");  
b= Integer.parseInt(in.readLine ());  
  
sum=a+b;  
diff=a-b;  
prod=a\*b;  
quo=a/b;  
rem=a%b;  
  
System.out.println("Sum of the Numbers = "+sum);  
System.out.println("Difference of the Numbers = "+diff);  
System.out.println("Product of the Numbers = "+prod);  
System.out.println("Quotient of the Numbers = "+quo);  
System.out.println("Remainder of the Numbers = "+rem);  
}  
catch(Exception e)  
{ };  
}  
}  
  
16. Write a program that will compute and display total bill where a loaf of bread cost Rs. 23.5 and an egg cost Rs. 5.75, where the user enters the loaf of bread and number of eggs to purchase.  
  
import java.io.\*;  
  
class bill  
{  
public static void main(String[] args)  
{  
DataInputStream in = new DataInputStream(System.in);  
  
double cb = 23.5d , ce = 5.75d , bill=0.0d;  
int nb , ne;  
  
try  
{  
System.out.print("Enter Number of Loafs of bread to buy : ");  
nb = Integer.parseInt(in.readLine());  
System.out.print("Enter Number of eggs to buy : ");  
ne = Integer.parseInt(in.readLine());  
  
bill = nb\*cb + ne\*ce;  
  
System.out.println("Total Bill = "+bill);  
}  
catch(Exception e)  
{ };  
}  
}  
  
17. Write a program to enter Principal, Rate and Time. Calculate and display Simple Interest and Amount.  
  
import java.io.\*;  
  
class bank  
{  
public static void main(String args[])  
{  
DataInputStream in = new DataInputStream(System.in);  
double p, t, r, si=0.0 , a=0.0;  
  
try  
{  
System.out.print("Enter Principal : ");  
p=Double.parseDouble(in.readLine());  
System.out.print("Enter Rate : ");  
r=Double.parseDouble(in.readLine());  
System.out.print("Enter Time : ");  
t=Double.parseDouble(in.readLine());  
  
si = (p\*t\*r)/100.0;  
a = p+si;  
  
System.out.println("Simple Interest = "+si);  
System.out.println("Amount = "+a);  
}  
catch(Exception e)  
{};  
}  
}  
  
18. Write a program to enter length and breadth of rectangular field. Calculate and display its area, perimeter and diagonal.  
  
import java.io.\*;  
  
class rect  
{  
public static void main(String args[])  
{  
DataInputStream in = new DataInputStream(System.in);  
  
double l,b,a=0.0,p=0.0,d=0.0d;  
  
try  
{  
System.out.print("Enter Length : ");  
l=Double.parseDouble(in.readLine());  
System.out.print("Enter Breadth : ");  
b=Double.parseDouble(in.readLine());  
  
a =l \* b;  
p = 2\*(l + b);  
d = Math.sqrt(l\*l + b\*b);  
  
System.out.println("Area of Rectangle = "+a);  
System.out.println("Perimeter of Rectangle = "+p);  
System.out.println("Diagonal of Rectangle = "+d);  
}  
catch(Exception e)  
{};  
}  
}***

***19.  
Write a program to input Roll (int), Name (String), Class(String), Section (char) marks of three subjects (float). Calculate and display total and average marks.  
  
import java.io.\*;  
  
class datatype  
{  
public static void main(String args[])  
{  
DataInputStream in = new DataInputStream(System.in);  
  
  
int rl=0;  
float tot = 0.0f,m1,m2,m3,avg =0.0f;  
char sec = ‘ ’;  
String nm , cl , x;  
  
try  
{  
System.out.print("Enter Roll no : ");  
rl = Integer.parseInt(in.readLine());  
System.out.print("Enter Name : ");  
nm = in.readLine();  
System.out.print("Enter Class : ");//VIII or 8  
cl = in.readLine();  
System.out.print("Enter section : ");//A or B or C  
sec = (char)in.read();  
x = in.readLine();  
System.out.print("Enter Marks of subject-1 : ");  
m1 = Float.parseFloat(in.readLine());  
System.out.print("Enter Marks of subject-2 : ");  
m2 = Float.parseFloat(in.readLine());  
System.out.print("Enter Marks of subject-3 : ");  
m3 = Float.parseFloat(in.readLine());  
  
tot = m1 + m2 + m3;  
avg = tot /3.0f;  
  
System.out.println("Total Marks : "+tot);  
System.out.println("Average marks : "+avg);  
}  
catch(Exception e)  
{};  
}  
}  
  
20.  
Write a program in java to input number of days. Find and display number of years, months and days.  
  
import java.io.\*;  
  
class days  
{  
public static void main(String args[])  
{  
DataInputStream in = new DataInputStream(System.in);  
int d, y, m=0;  
  
try  
{  
System.out.print("Enter no of days :");  
d = Integer.parseInt(in.readLine());  
  
y = d/365;  
d = d%365;  
m = d/30;  
d=d%30;  
  
System.out.println("Number of Years ="+y);  
System.out.println("Number of Months ="+m);  
System.out.println("Number of Days ="+d);  
}  
catch(Exception e)  
{};  
}  
}  
  
21.  
Write a program to input basic pay of an employee. Calculate da, hra, pf, gp and np. Display gp and np. Where da= 24% of bp, hra = 15% of bp, pf = 8.33% of bp. gp = bp + da + hra, np = gp - pf.  
  
import java .io.\*;  
  
class salary  
{  
public static void main(String[] args)  
{  
DataInputStream in= new DataInputStream(System.in);  
  
double bp, da, hra, pf, np, gp;  
bp = da = hra = pf = np = gp = 0.0d;  
  
try  
{  
System.out.print("Enter Basic Pay : ");  
bp=Double.parseDouble(in.readLine());  
  
da=(24/100.0)\*bp;  
hra=(15/100.0)\*bp;  
pf=(8.33/100.0)\*bp;  
  
gp = bp + da + hra;  
np = gp - pf;  
  
System.out.println("Gross Pay of employee = "+gp);  
System.out.println("Net Pay of employee = "+np);  
}  
catch(Exception e)  
{};  
}  
}***

***22. Write a program to enter temperature in Fahrenheit and convert it to temperature in Celsius using formula : c = 5/9(f-32).  
  
import java .io.\*;  
  
class temperature  
{  
public static void main(String[] args)  
{  
DataInputStream in= new DataInputStream(System.in);  
  
double f , c = 0.0d;  
  
try  
{  
System.out.print("Enter Temperature in Fahrenheit : ");  
f = Double.parseDouble(in.readLine());  
  
c = (5/9.0d) \* (f - 32.0d);  
  
System.out.println("Temperature in Celsius = "+c);  
}  
catch(Exception e)  
{ };  
}  
}  
  
23. Write a program in java to enter 3 sides of a triangle. Calculate and display its area using the formula. Area = √(s(s-a) (s-b) (s-c)) , s = (a + b + c) / 2  
  
import java .io.\*;  
  
class triangle  
{  
public static void main(String[] args)  
{  
DataInputStream in= new DataInputStream(System.in);  
double a , b , c , s = 0.0d , ar = 0.0d;  
  
try  
{  
System.out.println("Enter 3 side of a Triangle : ");  
a = Double.parseDouble(in.readLine());  
b = Double.parseDouble(in.readLine());  
c = Double.parseDouble(in.readLine());  
  
  
s = (a + b + c) / 2.0d;  
a = Math.sqrt(s \* (s - a) \* (s - b) \* (s - c));  
  
System.out.println("Area of Triangle = "+a);  
}  
catch(Exception e)  
{ };  
}  
}  
  
24. Write a program to input radius and height of a cone. Calculate and print the volume of the cone using formula: v=1/3πr2h.  
  
import java.io.\*;  
  
class cone  
{  
public static void main(String[] args)  
throws IOException  
{  
DataInputStream in= new DataInputStream(System.in);  
  
double r , h , v = 0.0d , p = 22/7.0d;  
  
System.out.println("Enter Radius and Height of Cone : ");  
r = Double.parseDouble(in.readLine());  
h = Double.parseDouble(in.readLine());  
  
v = (1/3.0d) \* p \* Math.pow(r,2) \* h;  
  
System.out.println("Volume of Cone = "+v);  
}  
}  
  
25. Write a program that will allow the cashier to input Marked Price of the product. The shop keeper offers successive discounts as 50% + 75% on the Marked Price. Calculate and display the successive discount and Selling Price.  
  
import java.io.\*;  
  
class markedprice  
{  
public static void main(String[] args)  
throws IOException  
{  
DataInputStream in = new DataInputStream(System.in);  
  
double mp , d1 , d2 , nmp , sp;  
mp = d1 = d2 = nmp = sp = 0.0d;  
  
System.out.print("Enter Marked Price of Product : ");  
mp = Double.parseDouble(in.readLine());  
  
d1 = (50/100.0d) \* mp;  
  
nmp = mp - d1;  
  
d2 = (75/100.0d) \* nmp;  
sp = nmp - d2;// sp = mp –(d1+d2);  
  
System.out.println("Discount-1 @ 50% = "+d1);  
System.out.println("Discount-2 @ 75% = "+d2);  
System.out.println("Selling Price = "+sp);  
}  
}***