# Hello world

class Second

{

public static void main(String[]args)

{

System.out.print("hello world"); System.out.print(' ava is simple"); System.out.println("Robust"); System.out.print("Object Oriented"); System.out.println("Kompetenzen Technology");

}

}

# Local Variable

class Local

{

void name()

{

int a=10; float b=2.5f; char c='a';

double d=14.33333; String e="Hello"; System.out.println(a); System.out.println(b); System.out.println(c); System.out.println(d); System.out.println(e);

}

void sum()

{

System.out.println("java is simple");

}

public static void main(String[]args)

{

Local out=new Local(); out.name();

out.sum();

}

}

{

int a=10; char b='D';

public static void main(String[] args)

{

Instance obj=new Instance(); System.out.println(obj.a); System.out.println(obj.b);

}

}

# Static Variable

class Sum

{

static int a=10;

public static void main(String[] args)

{

System.out.println(a);

}

}

# Static Method

class Sum

{

void display()

{

int a=10; System.out.println(a);

}

public static void main(String[] args)

{

display();

}

}

static

{

int a=10; System.out.println(a);

}

public static void main(String[] args)

{

System.out.println(java);

}

}

# Parameter

class Sum

{

static string college="interns"; int stu\_id;

public static void main(String[] args)

{

Sum java=new Sum(); java.stu\_id=1;

System.out.println(java.stud\_id+" "+college);

}

}

# One or more Parameter

class Sum

{

static string college="interns"; int stu\_id;

public static void main(String[] args)

{

Sum java=new Sum(); java.stu\_id=1;

Sum java1=new Sum(); java.stu\_id=2;

System.out.println(java.stud\_id+" "+college); System.out.println(java1.stud\_id+" "+college);

}

}

class Parameters

{

void display(int a1,int b1)

{

int a,b; a=a1; b=b1;

int c=a+b; System.out.println(c);

}

public static void main(String[] args)

{

Parameters java=new Parameters(); java.display(10,20);

}

}

**Paramter Passing using Int return type**

class Parameters

{

int display(int a1,int b1)

{

int a,b; a=a1; **b=b1;**

int c=a+b; return c;

}

public static void main(String[] args)

{

Parameters java=new Parameters(); int r=java.display(10,20); System.out.println(r);

}

}

class Swap

{

void display()

{

int a=10; int b=20; int c=a; a=b; b=c;

System.out.println("a="+a); System.out.println("b="+b);

}

public static void main(String[] args)

{

Swap java=new Swap(); java.display();

}

}

# Swapping with 2 variables

class Swap

{

void display()

{

int a=10; int b=20; a=a+b; b=a-b;

a=a-b; System.out.println("a="+a); System.out.println("b="+b);

}

public static void main(String[] args)

{

Swap java=new Swap(); java.display();

}

}

class If

{

public static void main(String[] args)

{

int a=9,b=6; if(a>b)

{

System.out.println("True");

}

else

{

System.out.println("False");

}

}

}

**If else if**

class lfelseif

{

public static void main(String[] args)

{

int a=5; if(a==6)

{

System.out.println("equal");

}

else if(a<6)

{

System.out.println("less");

}

else

{

System.out.println("greater");

}

}

}

class If

{

public static void main(String[] args)

{

int a=9,b=6; if(a>b)

{

System.out.println("True");

}

else

{

System.out.println("False");

}

}

}

# If else if

class Nestedif

{

public static void main(String[] args)

{

int a=10; if(a>=6)

{

if(a==6)

{

System.out.println("Equal");

}

else

{

System.out.println("Greater");

}

}

else

{

System.out.println("less");

}

}

}

class Switchex

{

public static void main(String[] args)

{

int a=1,b=2; switch(a,b)

{

case (a+b): System.out.println("T"); break;

case 3: System.out.println("F"); break;

case 4: System.out.println("TF"); break;

default: System.out.println("def");

}

}

}

**For loop**

class For1

{

public static void main(String[] args)

{

int i,s; int n=5;

for(i=1;i<=10;i+ +)

{

S= (i\*5)/n; System.out.println(s);

}

}

}

**While**

class Whilecon

{

public static void main(String[] args)

{

int a=O; while(a<=10)

{

System.out.println(a); a++;

}

}

}

**Do while**

class Dowhilecon

{

public static void main(String[] args)

{

int i=1; do

{

System.out.println(i); i++;

}

while(i<=5);

}

}

**Break**

class Dowhilecon

{

public static void main(String[] args)

{

for(int i=1;i<=10;i++)

{

Break;

}

System.out.println(i);

}

}

class Dowhilecon

{

public static void main(String[] args)

{

for(int i=1;i<=10;i++)

{

Continue;

}

System.out.println(i);

}

}

# Factorial

import java.util.Scanner; class Facto

{

public static void main(String[] args)

{

Scanner java=new Scanner(System.in); System.out.println("Enter the number:"); int fact=java.nextlnt();

for(int i=1;i<=5;i++)

{

fact=fact\*i; System.out.println(fact);

}

}

}

class Oddeven

{

public static void main(String[] args)

{

int a;

Scanner java=new Scanner(System.in); System.out.println("Enter the number"); a=java.nextlnt();

if(a%2==0)

{

System.out.println("even");

}

else

{

System.out.println("odd");

}

}

}

**Reverse of a number**

import java.util.Scanner; class Reverse

{

public static void main(String[] args)

{

int sum=0;

Scanner java=new Scanner(System.in); System.out.println("Enter n");

int n=java.nextlnt(); while(n>0)

{

int rem=n%10; sum=sum\*10+rem; n=n/10;

}

System.out.println(sum);

}

}

class Oddeven

{

public static void main(String[] args)

{

int a;

Scanner java=new Scanner(System.in); System.out.println("Enter the number"); a=java.nextlnt();

int num=n,count=0; for(int i=1;i<num;i++)

{

if(num%i==0)

{

Count++;

}

}

if(count==2)

{

System.out.println("prime");

}

else

{

System.out.println("not a prime);

}

}

}

class Palindrome

{

public static void main(String[] args)

{

Scanner java=new Scanner(System.in); System.out.println("Enter n");

int n=java.nextlnt(); int sum=O,rem,num=n; while(n>O)

{

rem=n%10; sum=sum\*10+rem; n=n/10;

}

if(sum==num)

{

System.out.println("palindrome");

}

else

{

System.out.println("not a palindrome");

}

}

}

# Multiplication table

import java.util.Scanner; class Multiplication

{

public static void main(String[] args)

{

int n=2,s;

for(int i=1;i<=10;i++)

{

S=(i\*n); System.out.println(i+"\*"+n+"="+s);

}

}

}

class Amstrong

{

public static void main(String[] args)

{

Scanner obj=new Scanner(System.in); System.out.println("enter n");

int n=obj.nextlnt();

int sum=O,rem,num=n; while(n>O)

{

rem=n%10; sum=sum\*10+rem; n=n/10;

}

if(sum==num)

{

System.out.println("Amstrong");

}

else

{

System.out.println("Not Amstrong");

}

}

}

# Fibonacci

class Fibonacci

{

public static void main(String[] args)

{

int a=0,b=1; System.out.print(a+" "+b); for(int i=O;i< =10;i++)

{

int c=a+b; a=b;

b=c;

System.out.print(" "+c);

} } }

class Sumoften

{

public static void main(String[] args)

{

Scanner java=new Scanner(System.in); System.out.println("Enter the number"); int n=java.nextlnt();

int sum=O;

for(int i=O;i<=n;i++)

{

sum=sum+i;

}

System.out.println(sum);

}

}

# Sum of ten numbers strating with 5

import java.util.Scanner; class Sumoften

{

public static void main(String[] args)

{

Scanner java=new Scanner(System.in); System.out.println("Enter the number"); int n=java.nextlnt();

int sum=O;

for(int i=5;i<=n;i++)

{

sum=sum+i;

}

System.out.println(sum);

}

}

class Replace

{

public static void main(String[] args)

{

for(int i=1;i<=20;i++)

{

if(i%3==0 && i%5==0)

{

System.out.println("/");

}

else if(i%3==0)

{

System.out.println("\*");

}

else if(i%5= =0)

{

System.out.println("\*");

}

else

{

System.out.println(i+"");}}}}

# Leap year

import java.util.Scanner; class Leep

{

public static void main(String[] args)

{

Scanner java=new Scanner(System.in); System.out.println("enter n");

int n=java.nextlnt();

if(((n%4==0) && (n%100!=0)) II (n%400==0))

{

System.out.println("leep");

}

else

{

System.out.println("not a leep");}}}

class Palprime

{

public static void main(String[] args)

{

Scanner java=new Scanner(System.in); System.out.println("Enter n");

int n=java.nextlnt();

int num=n,sum=0,flag=0,rem; for(int i=1;i<=n;i++)

{

if(n%i==0)

{

flag=flag+1;

}

}

while(n>0)

{

rem=n%10; sum=sum\*10+rem; n=n/10;

}

if(flag==2 && n==sum)

{

System.out.println("Palprime");

}

else

{

System.out.println("not Palprime");

}

}

}

class P1

{

public static void main(String[] args)

{

for(int i=1;i<=5;i++)

{

for(int j=1;j<=5;j++)

{

System.out.print(j+" ");

}

System.out.println();

}

}

}

class P2

{

public static void main(String[] args)

{

for(int i=1;i<=5;i++)

{

for(int j=1;j<=5;j++)

{

System.out.print(i+" ");

}

System.out.println();}}}

class P3

{

public static void main(String[] args)

{

for(int i=1;i<=5;i++)

{

for(int j=1;j<=i;j++)

{

System.out.print(j+" ");

}

System.out.println();

}

}

}

for(int j=1;j<=i;j++)

{

System.out.print(i+" ");

}

System.out.println();}}}

class P5

{

public static void main(String[] args)

{

for(int i=1;i<=5;i++)

{

for(int j=5;j>=1;j--)

{

if(i==j)

{

System.out.print("\*"+"");

}

else

{

System.out.print(j+" ");

}

}

System.out.println();}}}

class P6

{

public static void main(String[] args)

{

for(int i=1;i<=5;i++)

{

for(int j=5;j>=i;j--)

{

System.out.print(" ");

}

for(int k=1;k<=i;k++)

{

System.out.print(k);

}

System.out.println();}}}

class P7

{

public static void main(String[] args)

{

for(int i=1;i<=5;i++)

{

for(int j=1;j<=5;j++)

{

System.out.print("\*"+"");

}

System.out.println();}}}

class P8

{

public static void main(String[] args)

{

for(int i=1;i<=5;i++)

{

for(int j=1;j<=i;j++)

{

System.out.print("\*"+"");

}

System.out.println();

}

}

}

for(int j=5;j>=i;j--)

{

System.out.print(" ");

}

for(int k=1;k<=i;k++)

{

System.out.print("\*");

}

System.out.println();}}}

class P10

{

public static void main(String[] args)

{

for(int i=1;i<=5;i++)

{

for(int j=5;j>=i;j--)

{

System.out.print(" ");

}

for(int k=1;k<=i;k++)

{

System.out.print("\*"+"");

}

System.out.println();

}

}

}

package polymorphism; public class Compiletime { void display()

{

System.out.println("Sanjini");

}

void display(int a)

{

System.out.println(a);

}

void display(int a,String b)

{

System.out.println(a); System.out.println(b);

}

public static void main(String[] args) { Compiletime java=new Compiletime(); java.display();

java.display(10); java.display(10, "Dev");

} }

# Compiletime Ploymorphism using sequence of parameter

public class Sequenceofaruguments { void display(int a,float b)

{

System.out.println(a); System.out.println(b);

}

void display(float b,int a)

{

System.out.println(a); System.out.println(b);

}

public static void main(String[] args) { Sequenceofaruguments java=new Sequenceofaruguments(); java.display(10, 2.4f);

java.display(2.5f, 20);}}

package polymorphism;

public class Methodoverridding { void sum()

{

System.out.println("Sanjini");

}

}

# Method overridding extends

package polymorphism;

public class Methodoverriddingc extends Methodoverridding{ void display(int a)

{

super.sum(); System.out.println(a);

}

public static void main(String[] args) { Methodoverriddingc java=new Methodoverriddingc(); java.display(10);

}

}

# Compiletime Ploymorphism using Types of parameter

public class Typesofarguments { void display(int a)

{

System.out.println(a);

}

void display1(int a,float b)

{

System.out.println(a+" "+b);

}

public static void main(String[] args) { Typesofarguments java=new Typesofarguments(); java.display(10);

java.display1(20,20.4f);

}

}

package abstraction; abstract class Abss { abstract void no(); void display()

{

System.out.println("hello");

}

}

public class Abs extends Abss { void no()

{

String s="Sanjini"; System.out.println(s);

}

public static void main(String[] args) { Abs javab=new Abs();

javab.no(); javab.display();

} }

# Interface

interface Inter { void abc(); void bed();

}

public class lnter1 implements Inter{ public void abc() {

int a=10; System.out.println(a);

}

public void bed()

{

int b=30; System.out.println(b);

}

public static void main(String[] args) { lnter1 java1=new lnter10;

java1.abc(); java1.bcd();}}

package encapsulation; class Encapnew

{

private int rollno; private String name; public int getRollno() { return rollno;

}

public void setRollno(int rollno) { this.rollno = rollno;

}

public String getName() { return name;

}

public void setName(String name) { this.name = name;

}

}

public class Encap

{

public static void main(String[] args)

{

Encapnew java1=new Encapnew(); java1.setRollno(10); java1.setName("Sanjini"); System.out.println(java1.getRollno()); System.out.println(java1.getName());

}

}

package inheritance; class Single{

int b=10; void display()

{

System.out.println(b);

} }

class Child extends Single

{

void sum(int a)

{

System.out.println(a);

} }

public class Singleinheritance {

public static void main(String[] args) { Child java=new Child(); java.display();

java.sum(20);

} }

# Multilevel

class Parentnew

{

int a=10;

}

class Childnew extends Parentnew

{

String s="priya";}

class Child1 extends Childnew

{

float z=2.5f;}

public class Multilevel

{

public static void main(String[] args)

{

Child1 sc=new Child10; System.out.println(sc.a); System.out.println(sc.s); System.out.println(sc.z);

} }

class Hierparent

{

int a=10;

}

class Hierchild extends Hierparent{ String s="sanjini";

}

public class Hierchild1 extends Hierchild{ int b=20;

public static void main(String[] args)

{

Hierchild1 java=new Hierchild10; System.out.println(java.b); System.out.println(java.a); System.out.println(java.s);

}

}