```
matrix addition
11
   Int Port Javo. util. Statemen;
  class heterworlds
   Sublic state void main (string [ Jorgs) [
         Scomer inPat = 2001
         Scanner (System.in);
   int matricses: [[1, 23, [=, 5]]
  introvate [JEJ = [[2,3] [4,13]:
  int mat Som EJEJ= new int czJEZJ:
  int lea = neat #1. langth:
  for Cint i=0; ixlen; i++) 0
    for (int j=0; j elen; j++)
     mat sumciscis = matheiscis + matreciscis;
    System out. Printo (mat sum ciscist+"/t");
     System out Printlet);
   Sort alisatof name:
   import Java Wil Scomner;
        nord 5
  Public static void moin (stringe Jargs) {
   Scanner input-new scanner (system in)
  string arres: (sonana", "arre", carrot" "hadish", "jack");
   int len = arr length;
  charorder = input. nuxt(). (havAt(0);
   if Corder = A')f
      for (int 1=0; ixlen, i++)
```

```
for tint's = 111; ixar length 1311)8
  if for sis comparelolar cis) to)
  { String tome arreis;
    arreis = arreis:
    arreis - temp;
 Tystom out Brintln (Arrays tostring (orr));
else if lorder = = 'p') {
    for anti=o; icles; it) [
     for links = itis szar , length; iti) &
         it law cis. compare To larreis) (0) {
           string lem? = arreis;
           arreis = arreis!
          arreis = fems;
     3 3
   System.out. Println (Arrays, tostring (arr));
 matrix multiplication
Class matrix multiplication ?
Rublic static void main (string () args)
intese smatt = {{1,23, {5,33};
inteded mate = { [2,3}, [4,13]:
integed mats result = new integged;
for [m1 j=0; i <2; i+)[
  for (int i =0; jez ; j1)){
    for lint K= 0; K2; K1) [
    rout (IICI) 1= mat I [I] [X] mat CK ICIT; JJ3
```

```
System.out. Print ("Mat sum = ");
 for Cint i=0; i22; itt) {
    for (int;=0; j22j1+){
    System out Print Presult Eijcij +"
   system.out. printinlis
  333
           DutPut: Mat Sum = 1055
                              22 18
    Print the following fattern
15.
  im Port java. util. Scanner:
  Public class Pattern Printer &
     Public static void main (string = Jargs) {
        Scanner in Put = new Scanner (system.in);
       Scanner out. Print l'Enter the number tobe Printed:"):
      system-out-print ("Max number of limes printed:");
      int n= input. nextintis;
      for Cinti=13 1 <= 2 # 21-1; 1+) {
        System-out. Print [string. Value of [x). repeat count);
       input (lose()
    3
   3
          input
                  outut
```

```
Print special characters separately and print number of special
Characeters in the line?
Import java util sconner:
Public class special character counters
   Public static void main (string [ Jargs) {
    Scanner input = new scanner (systom in);
   scanner out. Printh ["Enter a line of lext:");
   string = input nextlino();
   intsp=o:
   System.out. Print ["special characters");
   for (Char Ch: S. to char Array ()) & {
     if (!character. isletter or digit-cun))[
       SPH)
      system. out print chn;
  System-out. Print ("In Number of Special characters: "+ SP);
  outPut
   Unobstr: helbo
  character # *
   Spical: 2
```

```
Composite number between a amd b
  import Sava util Samuer;
 Public class composite Numbers f
 Public static void main (string CJarys) &
     Scanner input: new scanner Esystem in);
     inta= input nextenter;
    intto input next Intil;
    for lintication is isbeining
       iffis composite (i)) {
         systand out Print (it ");
 Public static boolean is composite (intound) {
     if Inum (4) return Salse;
    for lintiez : i k= Math. sgrt (num); itt) {
    if Coum y ! i== 0) return true;
    return Salse;
 171 Pat: 12 19
out RA : 14 15 16_18
```

17

```
Programs to print the inverted full Pyramid Paltern?
18.
    im Port Sava. util. Scomur;
   Public class inverted Pyramid &
     Aublic static void main (string (3 args) {
        int n= new Scanner (system.in). ruxtInt():
        Jor linti=n; 1>=1:1-1) {
           System_out. Print("" repeat (n-i));
           System.out. Print(" * " refeat (i));
                     OutPw!
                              x x x x x
                                * * */*
     in Put's
   Find the factorial of n?
   im Port java - u til. & scanner;
   Public Class Factorial &
      Public static void main [string[Jargs] {
      Scanner insut = new Scanner (system in);
      int n= input. nextInt();
      for list i=i; i<==n; fact*= i++);
      intfact=1;
     system out. Print mi "factorial="+ fact);
      inPut:4
```

out Pul: 4 factorial = 24