

Colid, import java wil. \*; distract class solid of int dim 1, dim 2; abstract void printAreal); abstract wid print Volume 1); Solid (int a, int b) dim1 = a, dim2 = b; 3 doss Cylinder entends Shape of Cylinder (int a, intb) or super (a, b); 3 void printArea () of System. ord. printhe 1" the surface over of cylindr = "+ (6.283 185 + (dim1 + dim2) + (dim) '+ dim2)) + " sq . anils "); void prot volume () of system. not println (" The whome of the extinder =" + (3. 741592 & dim/\* dim/\* dim/ = dim 2)+" cubic units") class Cone enterds Shape · Cone (int a, int b) & super (a, b); 3 unid printArea ()

double l= Math. sgrt (dim / x dim) + dim 2xdin Bystom out printh ("The surv fun area of con =" + (3.14)5920 dim 1 x 1) +" sq · unib") Vaid print Volume () System and pronthy (" The wherme of some = "+ (3.191592 x dim 1 x dim 2/3);" couloic units. "); class Sphere extends Thepe of Sphere Cint a, int b) 2 super (a, b); 4 void point Area 1) of doubles Dystem-out println " The surface area of sphere = "+ (ax 3.141592 \* (dim/+dim) -1 " sq. units"); 3 word print bolume () & System and printh (" the volume of splure = 11 + (4 × 3.141592 × dim1 × dim1 × dim 1/3) 1' entr's um to" ); y

class Solid Main public solution void main (Aring angold) int a,b; Scannor in = new Scenner (8ystem in); System. out. printly 1" Fater the radius and height of Cylinder"); a = in nentInt(); b = in next Int(1) Cylinder r = nuv Cylinder (a, b); System and printhn " Enter the radium and height. a = in nentInt(); b= in nent tut (1) Core t = new Cone (a, b); System out projetter ("Enter seu radius of spena a = in nentInt(); Sphere c = new Sphere (a, a); or print Avea (); r. print Volume (); t- profint Aven (); to print V clume (); c. printArea (); 2 c. prittolume ();

import jana util. \*; class Person int status; Scanner 1's = new Scenner Csystem. in); void inp() System out printly "Enter the states of person: 1. for student and 2. for Employee "); status= in nent Int(); class Student entends Person int deg; Scaninir in = new Scanner (System.in) word imp() of System out printen l'Enter the education states of person: 1 Par UG and 2 · for Pg g. deg - in nent Int (); y class Stadent entends Person Scanner in = new Scanner Csystem . In)

void impl) & System out-prinths!" Eats the employment starten of person: 1. for Teaching and 2. for Non-Teatri y"), deg = in-nentInt() class Person Main of public Static anid main (String engs LJ)

of person p = nur person ();

p.inp(); p.inp(); Student 1 = nuv student (); Ensployee 5 = nuv Employee (); if (p. skuter == 1)

S.inp();
else e.inp(); System at printh ("Detation of person"); if (p. status = = 1) or system at printhel" status = Student" if (s.deg = = 1) eystem out printen ("Degree: (4"). System. out printhe ("Degree: Py").

else System out print ha 1" Status: En 1f (e.de == =1) System. out println(" Profession : Teaching " ); System out printly (" Professon i non - Teaching ");