

Write a java program to create a generic class stack which holds 5 integer and 5 double values class Generic Stack < T > 9 private Object [7 stack Array;

private int top =-1;

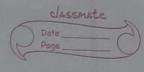
private static final int N=5; public Generic Hack () stack Array = new object [N]; public void publit value) if Ctop < N-1)
stack Array[++op]=value Systemoutprint/n ('Stock is full"); public T pop() if (top>=0) return (T) stack Array [top--]; System out-printin ("Stack is empty");
1 (turn owll)

public boolean is simply U

d return top == -1; }

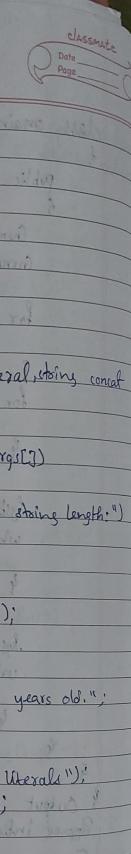
public boolean is full ()

f return top == N-1; }



class smain public static void main (String args (7) Greneric Stock / Integer > integerstock = new Greneric Stock <>(); Greneric Stock < Double > double Stock = new Greneric Stock <>(); for Cint i=1; ic=5: i+1){ integer. (tack. push (i); for (double i=1.0; iz=50; i+) {

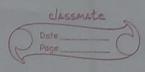
double Stack push(i); Systemout println (" Popped integers from the stack: "); while (! integerstack is Empty ()) { Systemout prindln (integerstack pop ()); Systemout println(" Popped double from the chack "); while (!double is Empty ()) 9 Bestern outprintln (* double (tack pop ()); Popped integers from the etack:



Popped doubles from the stack: 3.0 2.0 String Demonstrate string length, string likeral, string compat public class string 1 { public static void main (String args[]) System out printly (" Demonstrating string length:") String a = "Hello"; Gystom-out print In (a length ()); System.out-println ("Sto concab."); String Lot 2 "Aga" String age = "q", String mig = "He is " + age + " years old."; System.out. println (msq); System.out. println (" Demonstrate Uterals"); System out, print In ("abc. length()); output: Demonstrating string length: (11 concet: He is 9 years ald

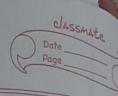
3

Dimonstrate



Use getchas O to extract Bruse from "Welcome to Brusce collège" public clau string 1 1

public static void main (Aring args E]) 5 String s = "Welcome to BMSCE college"; int start=10; int end=16; chas buf [] = new char [end-start]; s-get Chars (stront, end, buf, 0); System.out.println (buf); Output



Write a Java program to create an abdract day snape with abstract method calculate Areas and calculate Perimeter. Greate subclasses Circle and Triange that extend the Shape class.

import jours lang. Math;

abstract class Shape 9
double a;
double b;
double c;

abstract void calculatefract; abstract void calculateferimeter();

class Triangle extends Shape of
Triangle (double x, double y, double z)

a=x',

void aleulate Area ()

System out. printly ("Area = "+ (Math. sqrt (s * (s-a)*

void calabate Perimeters

System ov toprintln ("Parimeter = " + (a+b+c))

(s-6) + (s-c)));

9

Classmate

Date
Page

class Circle (double r) Shape { void alwhate Area () System.out.println ("Area =" + (Math.PI + a * a)); System.out.println(" Perimeter = " + (2 * Math.PI * a)); ShapeMa public static void main (String Edargs) Triangle t= new Triangle (2.0,3.0, 5.0)'
Civel C: new Gircle (5.0); t-Calulate Area (); t. cal whate Perimeter (): C. calculate Areaci; c. calculate Perimeter (); Output: Area - 4.145 18098794425 Shreyas Roo M Parimeter = 1+0 Bungaca72 Area = 78.53981633974483 Perimeteo = 31-41592653589793

Si collab