**inheritance(Assignment -4)**

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| **1)**  We are given an array arr[] of size n. Numbers are from 0 to (n-1) in random order. The array has only one repetitive element. We need to find the repetitive element.  **sample input**  **5 // n size**  **1**  **3**  **2**  **3**  **4**  **output**  **3**  **2)**  Given two coordinates of a line as (x1, y1) and (x2, y2), find if the line passing through these points also passes through origin or not.  **sample input:**  **10 //x1**  **0 //y1**  **20 //x2**  **0 //y2**  **output**  **yes**  **formula: x1(y2-y1) = y1(x2-x1)**  **3)**  Given two sorted arrays of distinct elements, we need to print those elements from both arrays that are not common. The output should be printed in sorted order.  **sample input:**  **3**  **5**  **10**  **20**  **30**  **20**  ***25***  ***30***  ***40***  **50**  **output:**  **10 25 40 50**  **4)**  wap to print the elements from the array that digit **k** .  **sample input:**  **5 //(no of input)**  **3 //k th digit**  **13**  **22**  **34**  **45**  **66**  **output**  **13**  **34**    **5)**  Given an array of size N-1 and the mean of N elements (one element is not given). We need to find the missing value X in the array.  **sample input:**  **3 // no of input**  **2**  **4**  **10**  **9 // mean value**  **sample output :**  **10**  **6)**  We have a sorted array with duplicate elements and we have to find the index of last duplicate element and print index of it and also print the duplicate element. If no such element found print a message no item is present.  **sample input:**  6  1  5  5  6  6  7  output:  4  **7)**  **wap to count elements in an array which having penta 4 in an array.**  **sample input:**  **6 // no of input**  **15554**  **15555543**  **232555556**  **124545656**  **245545535**  **121234343**  **sample output:**  **2**    **8)**  **wap to sort only even no in ascending order.**  **sample input:**  **5**  **12**  **23**  **35**  **4**  **17**  **sample output:**  **4 //no of input**  **23**  **35**  **12**  **17**    **9)**  **wap to scan an array and sort half the array in ascending order and another half descending order.**  **sample input:**  **10**  **12**  **2**  **34**  **5**  **66**  **7**  **88**  **9**  **11**  **8**  **output:**  **2 5 12 34 66 88 11 9 8 7**  **10)**  wap to print the fibonnaci series.  sample input:  6 //n values  1  1  2  3  5  8 | **#include<iostream>**  **using namespace std;**  **class demo{**  **protected:**    **int a[50],n;**  **public:**  **demo(int a[],int n);**  **void logic(void);**  **};**  **class demo2:public demo{**  **....**  **....**  **....**  **....**  **};**  **....**  **....**  **....**  **#include<iostream>**  **using namespace std;**  **class demo{**  **protected:**  **int x1;**  **public:**  **demo(int x1);**    **};**  **class demo2:public demo{**  **protected:**  **int y1;**  **public:**  **....**  **....**  **void logic(demo2 p);**  **};**  **int main(){**  **....**  **....**  **....**  **....**  **}**  **#include<iostream>**  **using namespace std;**  **class demo1{**  **protected:**  **int a[100],n;**  **...**  **....**  **....**  **};**  **class demo2:public demo1{**  **public:**  **void logic(demo2);**  **};**  **int main(){**  **demo2 p,q;**  **p.input();**  **q.input();**  **p.logic();**  **}**  **#include<iostream>**  **using namespace std;**  **class demo2**  **{**  **protected:**  **int a[50],n;**  **public:**  **void input(void);**  **};**  **....**  **....**  **....**  **....**  **class demo3:public dem1{**  **public:**  **void display();**  **};**  **int main()**  **{**  **demo3 p;**  **p.input();**  **p.logic();**  **p.display();**  **}**  **#include<iostream>**  **using namespace std;**  **class demo{**  **protected:**    **int a[50],n;**  **public:**  **demo(int a[],int n);**  **void logic(void);**  **};**  **class demo2:public demo{**  **....**  **....**  **....**  **....**  **};**  **....**  **....**  **....**  **#include<iostream>**  **using namespace std;**  **class demo1**  **{**  **protected:**  **int a[50],n;**  **void input(int [],int);**  **};**  **class demo2:public demo1{**  **public:**  **void logic(void);**  **};**  **class demo3:public demo2{**  **public:**  **void display();**  **};**  **int main(){**  **.....**  **.....**  **.....**  **}**  **#include<iostream>**  **using namespace std;**  **class demo1**  **{**  **protected:**  **int a[50],n;**  **void input(int [],int);**  **};**  **class demo2:public demo1{**  **public:**  **void logic(void);**  **};**  **class demo3:public demo2{**  **public:**  **void display();**  **};**  **int main(){**  **.....**  **.....**  **.....**  **}**  **#include<iostream>**  **using namespace std;**  **class demo**  **{**  **protected:**  **int a[50],n;**  **public:**  **demo(int [],int);**  **};**  **class test:public demo{**  **....**  **....**  **....**  **}**  **....**  **....**  **....**  **#include<iostream>**  **using namespace std;**  **class demo**  **{**  **protected:**  **int a[50],n;**  **public:**  **demo(int [],int);**  **};**  **class test:public demo{**  **....**  **....**  **....**  **}**  **....**  **....**  **....**  **#include<iostream>**  **using namespace std;**  **class test{**  **protected:**  **int n;**  **public:**  **void input(int);**  **};**  **class demo:public test{**  **public:**  **void logic();**  **};**  **.....**  **.....**  **.....**  **.....** |
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