SOLUTIONS TO PAST QUESTIONS JAVA

2013/2014

QUESTION 2A.

// WE ARE TO CODE IN CLASS

MAIN CLASS

package solwizards;

import javax.swing.JOptionPane;

public class question1ah {

public static void main(String[]args){

science1h science=new science1h();

arts1h arts= new arts1h();

commercial1h commercial= new commercial1h();

String myclass;

int department;

myclass=JOptionPane.showInputDialog("SELECT AS BELOW FOR EXAM INSTRUCTIONS\n1.SCIENCE\n2.ARTS\n3.COMMERCIAL");

department=Integer.parseInt(myclass);

switch(department){

case 1:

science.science();

break;

case 2:

arts.arts();

break;

case 3:

commercial.commercial();

break;

default:

JOptionPane.showMessageDialog(null,"INVALID ENTRY. TRY AGAIN!!!","ERROR MESSAGE", JOptionPane.ERROR\_MESSAGE);

}

}

}

// 3 SUB CLASSES ACCORDING TO THE QUESTION

SCIECNCE CLASS

import javax.swing.JOptionPane;

public class science1h {

public void science(){

JOptionPane.showMessageDialog(null,"1. You are permitted to come with calculator and pencil.\n" + "2. You will be taking 5 exams.\n" + "3. For you, Mathematics is compulsory regardless of your chosen course.","SCIENCE EXAM INSTRUCTION",JOptionPane.INFORMATION\_MESSAGE);

}

}

ARTS CLASS

import javax.swing.JOptionPane;

public class arts1h {

public void arts(){

JOptionPane.showMessageDialog(null,"1. You are not permitted to come with calculator and pencil.\n" +"2. You will be taking 3 exams.\n" +"3. For you, Literature is compulsory regardless of your chosen course.","ARTS EXAM INSTRUCTION",JOptionPane.INFORMATION\_MESSAGE);

}

}

COMMERCIAL CLASS

import javax.swing.JOptionPane;

public class commercial1h {

public void commercial(){

JOptionPane.showMessageDialog(null,"1.\tYou are permitted to come with your calculator and pencil.\n" +"2. You will be taking 4 exams.\n" +"3. For you, Government is compulsory regardless of your chosen course.","COMMERCIAL EXAM INSTRUCTION",JOptionPane.INFORMATION\_MESSAGE);

}

}

QUESTION 2A

import java.util.Random;

public class question2a {

public static void main(String[] args) {

Random ludo=new Random();

String playerid[]= {"PLAYER001","PLAYER002","PLAYER003","PLAYER004"};

int playpoint[][]= new int[4][3];

int sumpoint[]={0,0,0,0};

for(int i=0;i<4;i++){

for(int j=0;j<3;j++){

playpoint[i][j]=ludo.nextInt(6)+1;

sumpoint[i]=sumpoint[i]+playpoint[i][j];

}

}

for(int i=0;i<4;i++){

System.out.printf("%s POINTS ARE:\n",playerid[i]);

for(int j=0;j<3;j++){

System.out.println(playpoint[i][j]);

}

System.out.printf("SUM OF POINT IS %d\n",sumpoint[i]);

if(sumpoint[0]>sumpoint[i]){

sumpoint[0]=sumpoint[i];

playerid[0]=playerid[i];

}

}

System.out.printf("THE WINNER IS %s ACCEPT MY CONGRATULATION",playerid[0]);

}

}

QUESTION 2B

import javax.swing.JOptionPane;

public class question2b {

public static void main(String[] args) {

String username;

username=JOptionPane.showInputDialog("ENTER YOUR USERNAME");

JOptionPane.showMessageDialog(null, "WELCOME "+username+" ! This is my world!","RECOGNITION",JOptionPane.WARNING\_MESSAGE);

}

}

QUESTION 3A

// WE ARE TO CODE IN CLASSES ONCE AGAIN.

MAIN CLASS

package solwizards;

public class question3a {

public static void main(String[] args) {

facto factorials=new facto();

factorials.inputs();

factorials.factorial();

factorials.permutation();

factorials.combination();

}

}

SUB CLASS

import java.util.Scanner;

public class facto {

int n,m,r;

public void inputs(){

Scanner myget = new Scanner(System.in);

System.out.print("ENTER THE VALUE FOR n");

n=myget.nextInt();

System.out.print("ENTER THE VALUE FOR m");

m=myget.nextInt();

r=n-m;

}

void factorial(){

int i,fact1=1;

for(i=1;i<=n;i++){

fact1=fact1\*i;

}

System.out.printf("\nTHE FACTORIAL OF n IS %d",fact1);

}

void permutation(){

if((n>0)&(m>0)){

int i,per,fact1=1,fact2=1;

for(i=1;i<=n;i++){

fact1=fact1\*i;

}

for(i=1;i<=r;i++){

fact2=fact2\*i;

}

per=fact1/fact2;

System.out.printf("\nTHE PERMUTATION OF n AND m IS %d",per);

}

}

void combination(){

if((n>0)&(m>0)){

int i,com,fact1=1,fact2=1,fact3=1;

for(i=1;i<=n;i++){

fact1=fact1\*i;

}

for(i=1;i<=m;i++){

fact2=fact2\*i;

}

for(i=1;i<=r;i++){

fact3=fact3\*i;

}

com=fact1/(fact2\*fact3);

System.out.printf("\nTHE COMBINATION OF n AND m IS %d",com);

}

}

}

QUESTION NO 3B

public class question3b {

public static void main(String[] args) {

int myfabo[]= new int[50];

myfabo[0]=0;

myfabo[1]=1;

for(int i=2;i<50;i++){

myfabo[i]=myfabo[i-2]+myfabo[i-1];

}

System.out.println("HERE IS MY FABONACII SERIES ");

for(int i=0;i<50;i++){

System.out.printf("%d,",myfabo[i]);

}

}

}

QUESTION NO 4A

import java.util.Random;

public class question4a {

public static void main(String[] args) {

Random myquestions= new Random();

int cbt[][]=new int[200][35];

for(int i=0;i<200;i++){

for(int j=0;j<35;j++){

cbt[i][j]=myquestions.nextInt(300)+1;

}

}

for(int i=0;i<200;i++){

System.out.println("\nGST AND ENT QUESTIONS FOR STUDENT "+ (i+1)+" ARE ");

for(int j=0;j<35;j++){

System.out.print(cbt[i][j]+", ");

}

}

}

}

QUESTION NO 4B

import java.awt.Canvas;

import java.awt.Color;

import java.awt.Font;

import java.awt.Graphics;

import javax.swing.JFrame;

public class question4b extends Canvas {

public static void main(String[] args) {

JFrame frame = new JFrame();

Canvas canvas = new question4b();

canvas.setSize(400, 400);

frame.getContentPane().add(canvas);

frame.pack();

frame.setVisible(true);

}

//I DID NOT FOLLOW THE PARAMETER STATED IN THE QUESTIONS(I found mine more interesting). YOU CAN JUST ADJUST THAT ON YOUR OWN BY FOLLOWING SAME PROCESS. Abi naw!!

public void paint(Graphics g) {

g.setColor(Color.red);

g.drawOval(23, 25, 56, 63);

g.setColor(Color.blue);

g.fillRect(70, 28, 58, 59);

g.setColor(Color.CYAN);

g.drawRect(120,26,155,59);

g.setColor(Color.YELLOW);

int x[]={180,45,315};

int y[]={45,135,135};

g.setColor(Color.RED);

g.fillPolygon(x,y,x.length);

g.setFont(new Font("Courier New",Font.BOLD,12));

g.setColor(Color.MAGENTA);

g.drawString("DO THEY MAKE SENSE?", 100, 200);

}

}

**PAST QUESTIONS 2014/2015**

Question 1A

// number 1a is really genius work. I tried all my best but could not provide satisfactory answer then I use SET with HashSet implementation which is always use to prevent duplication. Okay let us see:

import java.util.Random;

import java.util.Set;

import java.util.HashSet;

// Look! I intentionally list all what is needed from util library so that you can understand. Import java.util.\*; will save pen ink or typing time as the case maybe;

public class staffs {

public static final void main(String[] args){

Random stafforder = new Random();

Set < Integer> container = new HashSet <>();

Set < Integer> container2 = new HashSet <>();

System.out.print("ORDER FOR THE FIRST PERIOD IS");

for(int i = 0; i <5; i++){

while( true ) {

int num =stafforder.nextInt (5) + 1;

if( container.contains (num)== false ) {

container.add ( num );

System.out.println ( num );

break;

}

}

}

System.out.println("\nORDER FOR THE SECOND PERIOD IS");

for(int i = 0; i <5; i++){

while( true ) {

int num = stafforder.nextInt (5) + 1;

if( container2.contains (num)== false ) {

container2.add ( num );

System.out.println ( num );

break;

}

}

}

}

}

QUESTION 1B

import java.util.Random;

public class questions1b {

public static void main(String[] args) {

Random rand= new Random();

int mardice1,mardice2,sumdice;

mardice1=rand.nextInt(6)+1;

mardice2=rand.nextInt(6)+1;

sumdice=mardice1+mardice2;

switch(sumdice){

case 1:

System.out.print("Illogical to throw 1: It seems you prefer been single! Are U been forced into marriage proposal?");

break;

case 2:

System.out.print("Too young for marriage proposal, make your study your priority at this time!");

break;

case 3:case 4:case 5:

System.out.print("Incompatible, sorry, take time to re-pray and re-dream!");

break;

case 6:

System.out.print("Spouse-to-be is not the best match, but manageable, U may wish to proceed where there is no alternative!");

break;

case 7:

System.out.print("Congrats, perfect match!");

break;

case 8:

System.out.print("Too good a partner, exceedingly perfect!");

break;

case 9:case 10:

System.out.print("You are a striker, not sure you are ready for marriage. Be serious and stop burning!");

break;

case 11: case 12:

System.out.print("Too old, why did you stay long till now? Hope someone will come for you soonest!");

break;

default:

System.out.print("INVALID THROW. HOW IS THIS POSSIBLE?");

}

}

}

QUESTION 1C

import java.util.Random;

public class questions1c {

public static void main(String[]args){

int mythrow;

double h=0,t=0,count=0,percenth,percentt;

Random coin= new Random();

for(int i=0;i<12;i++){

count++;

mythrow=coin.nextInt(2);//it sees only 0 and 1 as the 2 figures

if(mythrow==1){

System.out.println("THROW"+(i+1)+" IS H");

h++;

}

if(mythrow==0){

System.out.println("THROW"+(i+1)+" IS T");

t++;

}

}

System.out.printf("TOTAL NUMBER OF HEADS IS %1.0f\n",h);

System.out.printf("TOTAL NUMBER OF TAILS IS %1.0f\n",t);

percenth=(h/count)\*100;

percentt=(t/count)\*100;

System.out.printf("PERCENTAGE FOR TOTAL NUMBER OF HEADS IS %4.2f\n",percenth);

System.out.printf("PERCENTAGE FOR TOTAL NUMBER OF TAILSS IS %4.2f\n",percentt);

}

}

QUESTION 2A

// you can use if statement if it is more easier for you. No one is specified in the question.

import javax.swing.JOptionPane;

public class questions2a {

public static void main(String[] args) {

String babyno;

int numofbabies;

babyno=JOptionPane.showInputDialog("ENTER THE NUMBER OF YOUR BABIES");

numofbabies=Integer.parseInt(babyno);

switch(numofbabies){

case 1:

JOptionPane.showMessageDialog(null,"You have not inputted anything to suggest you have given birth","BIRTH GREETING APP",JOptionPane.INFORMATION\_MESSAGE);

break;

case 2:

JOptionPane.showMessageDialog(null,"Congrats, u have a baby","BIRTH GREETING APP",JOptionPane.INFORMATION\_MESSAGE);

break;

case 3:

JOptionPane.showMessageDialog(null,"Wonderful, "+numofbabies+" how will you carry?","BIRTH GREETING APP",JOptionPane.INFORMATION\_MESSAGE);

break;

case 4: case 5:

JOptionPane.showMessageDialog(null,"I was told you delivered"+numofbabies,"BIRTH GREETING APP",JOptionPane.INFORMATION\_MESSAGE);

break;

case 6:

JOptionPane.showMessageDialog(null,"This is a miracle","BIRTH GREETING APP",JOptionPane.INFORMATION\_MESSAGE);

break;

case 7:

JOptionPane.showMessageDialog(null,"I can’t believe this","BIRTH GREETING APP",JOptionPane.INFORMATION\_MESSAGE);

break;

default:

JOptionPane.showMessageDialog(null,"This is beyond me – can someone explain this to me, "+numofbabies+" babies?","BIRTH GREETING APP",JOptionPane.INFORMATION\_MESSAGE);

break;

}

}

}

QUESTION 2B

OOPS! STILL LOADING. MAKING SOME ADJUSTMENT.

QUESTION 3A

import java.util.Scanner;

public class questions3a {

public static void main(String[] args) {

Scanner myget = new Scanner(System.in);

int memory[]=new int[14];

//NOW STORING THE VALUES IN THE POT BY THE OWNER SECRETLY

for(int i=0;i<14;i++){

System.out.print("ENTER "+(i+1)+" VALUES ");

memory[i]=myget.nextInt();

}

//COMPUTING FOR THE LARGEST

for(int i=0;i<14;i++){

if(memory[0]<memory[i]){

memory[0]=memory[i];

}

}

System.out.printf("THE LARGEST VALUE IS %d\n",memory[0]);

for(int i=0;i<14;i++){

if(memory[0]>memory[i]){

memory[0]=memory[i];

}

}

System.out.printf("THE SMALLEST VALUE IS %d",memory[0]);

}

}

QUESTION 3B:

import java.util.Random;

public class questions3b {

public static void main(String[] args) {

Random rand=new Random();

int mypin;

System.out.print(" THIS IS THE PIN");

for(int i=0;i<16;i++){

mypin=rand.nextInt(9)+1;

System.out.print(mypin);

}

}

}

QUESTION 3C

import java.util.Random;

public class questions3c {

public static void main(String[] args) {

Random ludo=new Random();

int player[][]=new int[4][20];

String players[]={"DAYO","SAMUEL","FEMI","THOMPSON"};

int sumthrow[]={0,0,0,0,0};

for(int i=0;i<4;i++){

for(int j=0;j<20;j++){

player[i][j]=ludo.nextInt(6)+1;

sumthrow[i]=sumthrow[i]+player[i][j];

}

}

for(int i=0;i<4;i++){

System.out.printf("SUM OF THROWS FOR %s IS %d\n",players[i],sumthrow[i]);

}

for(int i=0;i<4;i++){

for(int j=0;j<20;j++){

if(sumthrow[0]>sumthrow[i]){

sumthrow[0]=sumthrow[i];

players[0]=players[i];

}

}

}

System.out.printf("%s IS THE LOSSER",players[0]);

}

}

Hmm! Number 4 to be sent later. Maybe after the exam. Anyway just joking. Soon I promise.

I did not forgot number 1d. you can do the computation yourself.

Take care.

USE CORRESPONDING CLASS NAME I.E. CLASS NAME MUST MATCHES FILE NAME

***For any correction on the above please do well to contact me or to ask for any explanation.***

***Jesus loves you.***

***07062069165***