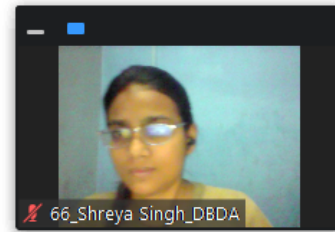


Q1 : Write a Java program to create a new array list, add some elements (string) and print out the collection by using for-each loop.

```
import java.io.*;
import java.util.*;
import java.util.ArrayList;

class ArrayNames
{
    public static void main(String args[])
    {
        ArrayList<String> names=new ArrayList<> ();
        names.add("Cdac");
        names.add("Mumbai");
        names.add("DBDA");
        System.out.println(names);
        for(String names:names)
        {
            System.out.println(names);
        }
    }
}
```



```
java\java S\java_exam>javac ArrayNames.java

java\java S\java_exam>java ArrayNames
Cdac
Mumbai
Dbda

java\java S\java_exam>javac a.java
```



Q2 : Develop a class BankAccount having following data members : (10 Marks)

int accno

double balance

Write appropriate constructors to initialize data members

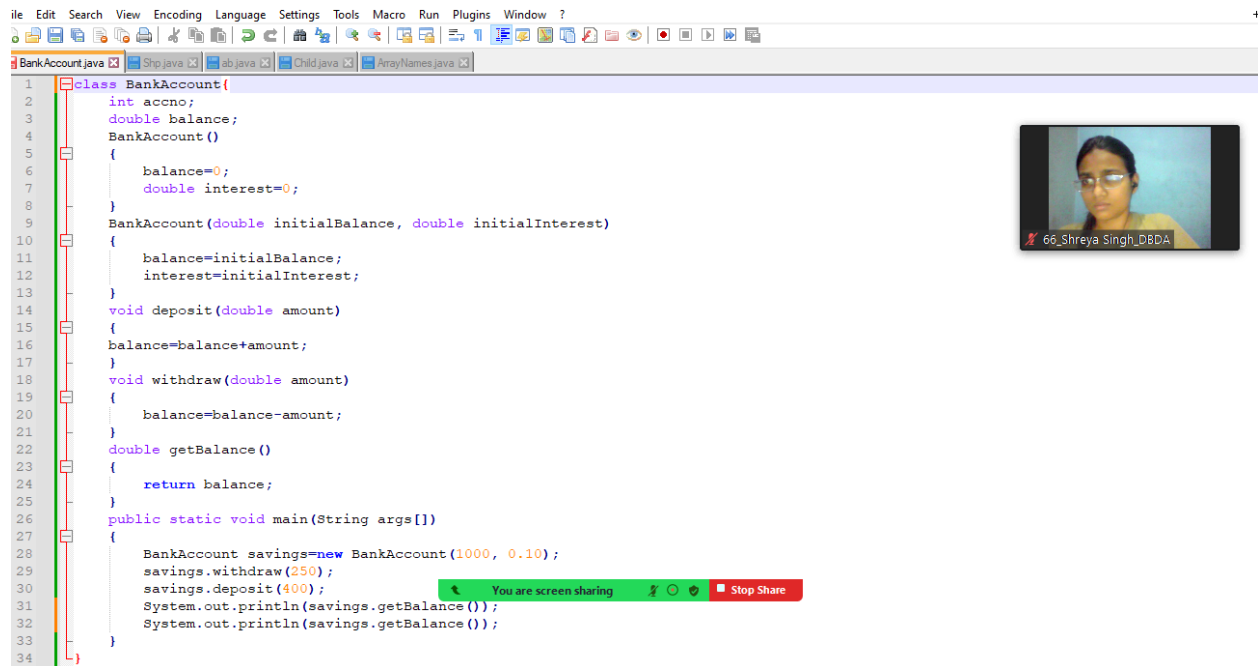
Define the following functions :

withdraw : balance will reduce

deposit : balance will increase

show : display accno and balance

If user tries to withdraw more than the balance, use exception handling code. Demonstrate the concept of exception handling in main() function.



```
1 class BankAccount{
2     int accno;
3     double balance;
4     BankAccount()
5     {
6         balance=0;
7         double interest=0;
8     }
9     BankAccount(double initialBalance, double initialInterest)
10    {
11        balance=initialBalance;
12        interest=initialInterest;
13    }
14    void deposit(double amount)
15    {
16        balance=balance+amount;
17    }
18    void withdraw(double amount)
19    {
20        balance=balance-amount;
21    }
22    double getBalance()
23    {
24        return balance;
25    }
26    public static void main(String args[])
27    {
28        BankAccount savings=new BankAccount(1000, 0.10);
29        savings.withdraw(250);
30        savings.deposit(400);
31        System.out.println(savings.getBalance());
32        System.out.println(savings.getBalance());
33    }
34 }
```

66_Shreya Singh_DBDA

You are screen sharing Stop Share

Q3 : Write a program to create a class named shape. In this class we have three sub classes circle, triangle and square, each class has two member function named draw () and erase (). Create these using Runtime Polymorphism concepts.

```
class Shape
{
    void draw()
    {
        System.out.println("draw any Shape");
    }
    void erase()
    {
        System.out.println("erase any Shape");
    }
}

class Circle extends Shape
{
    void draw()
    {
        System.out.println("draw Circle");
    }
    void erase()
    {
        System.out.println("erase Circle");
    }
}

class Triangle extends Shape
{
    void draw()
    {
        System.out.println("draw TRiangle");
    }
    void erase()
    {
        System.out.println("erase Triangle");
    }
}
```



```

}
class Square extends Shape
{
    void draw()
    {
        System.out.println("draw Square");
    }
    void erase()
    {
        System.out.println("erase Square");
    }
}
public class Shp
{
    public static void main(String args)
    {
        Shp s= new Circle();
        Shp t= new Triangle();
        Shp u= new Square();
        s.draw();
        s.erase();
        t.draw();
        t.erase();
        u.draw();
        u.erase();
    }
}

```

```

G:\dbda\java\java S\java_exam>java a
Error: Main method not found in class a, please define the main method as:
    public static void main(String[] args)
or a JavaFX application class must extend javafx.application.Application

G:\dbda\java\java S\java_exam>javac a.java

G:\dbda\java\java S\java_exam>java a
Error: Main method not found in class a, please define the main method as:
    public static void main(String[] args)
or a JavaFX application class must extend javafx.application.Application

G:\dbda\java\java S\java_exam>

```



4.

```
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
ArrayNames.java BankAccount.java Shp.java ab.java Child.java

1 class GrandParent
2 {
3     String grandFatherName, grandMotherName;
4     GrandParent(String a, String b)
5     {
6         grandFatherName=a;
7         grandMotherName=b;
8         System.out.println("grandFatherName: " +grandFatherName);
9         System.out.println("grandMotherName: " +grandMotherName);
10    }
11 }
12
13 class Parent extends GrandParent
14 {
15     String FatherName, MotherName;
16     Parent(String a, String b)
17     {
18         FatherName=c;
19         MotherName=d;
20         System.out.println("FatherName: " +FatherName);
21         System.out.println("MotherName: " +MotherName);
22     }
23 }
24
25 class Child extends Parent
26 {
27     Child(String c, String d, String a, String b)
28     {
29         super(c,d,a,b);
30     }
31     public static void main(String args[])
32     {
33         Child child=new Child("Shankar","Devi","Vijay","Geeta");
34     }
35 }
```



```
G:\dbda\java\java S\java_exam>javac Child.java
Child.java:31: error: ';' expected
    public static void main(String args[])
                                ^
1 error

G:\dbda\java\java S\java_exam>javac Child.java
Child.java:31: error: ';' expected
    public static void main(String args[])
                                ^
1 error
```

