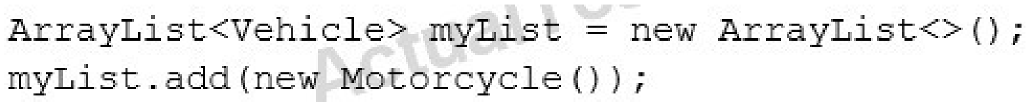
Java SE 8 Programmer I, Exam Number- 1ZO-808
Round-37, Pre Vendor Exam Quiz, Date- 19-05-2019

QUESTION NO: 1

Given the following segment of code :



```
ArrayList<Vehicle> myList = new ArrayList<>();
myList.add(new Motorcycle());
```

Which two statements, if either were true, would make the code compile?

A. Vehicleis an interface that is implemented by theMotorcycleclass.

B. VehicleandMotorcycleboth implement theTransportationinterface

C. Vehicleis a superclass ofMotorcycle.

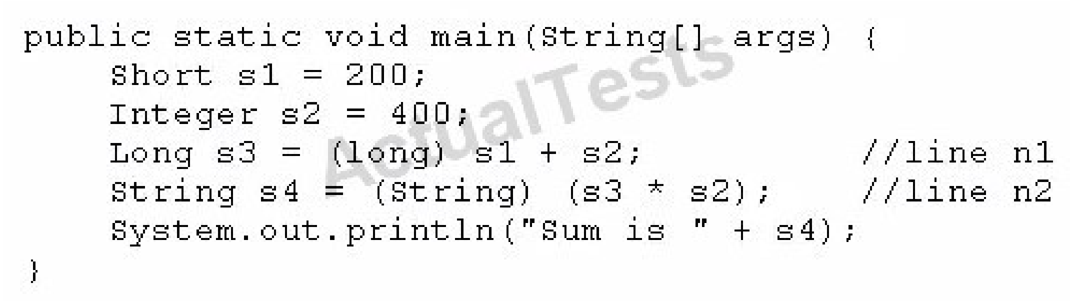
D. Motorcycleis a superclass ofVehicle.

E. VehicleandMotorcycleboth extend the Transportation superclass.

F. Motorcycleis an interface that implements the Vehicleclass.

QUESTION NO: 2

Given the code fragment:



```
public static void main(String[] args) {
    Short s1 = 200;
    Integer s2 = 400;
    Long s3 = (long) s1 + s2;           //line n1
    String s4 = (String) (s3 * s2);     //line n2
    System.out.println("Sum is " + s4);
}
```

What is the result?

A. Sum is 600

B. Compilation fails at line n1.

C. Compilation fails at line n2.

D. A ClassCastException is thrown at line n1.

E. A ClassCastException is thrown at line n2.

QUESTION NO: 3

What is the name of the Java concept that uses access modifiers to protect variables and hide them within a class?

A. Encapsulation

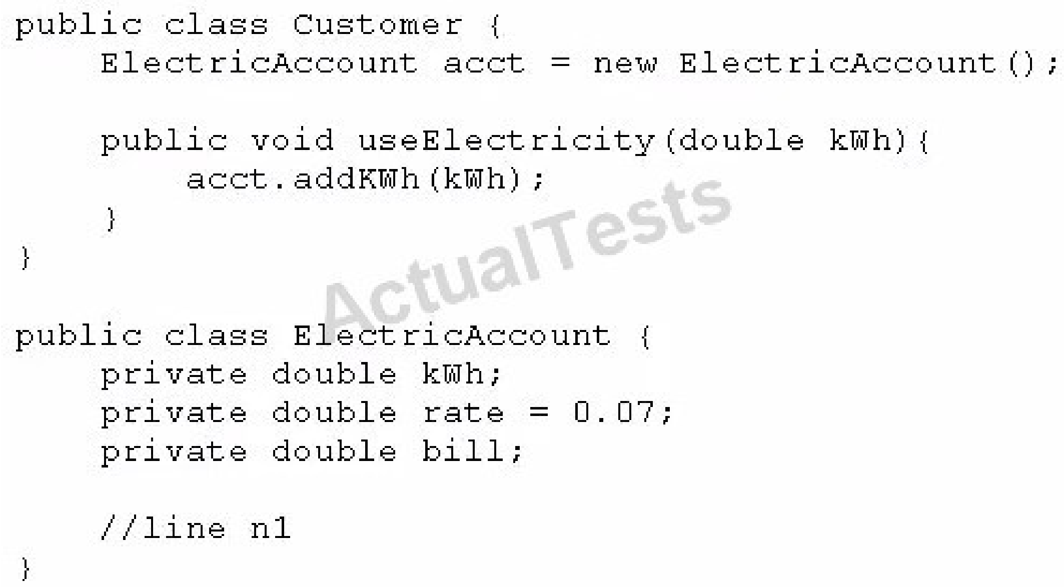
B. Inheritance

C. Abstraction
D. Instantiation

E. Polymorphism

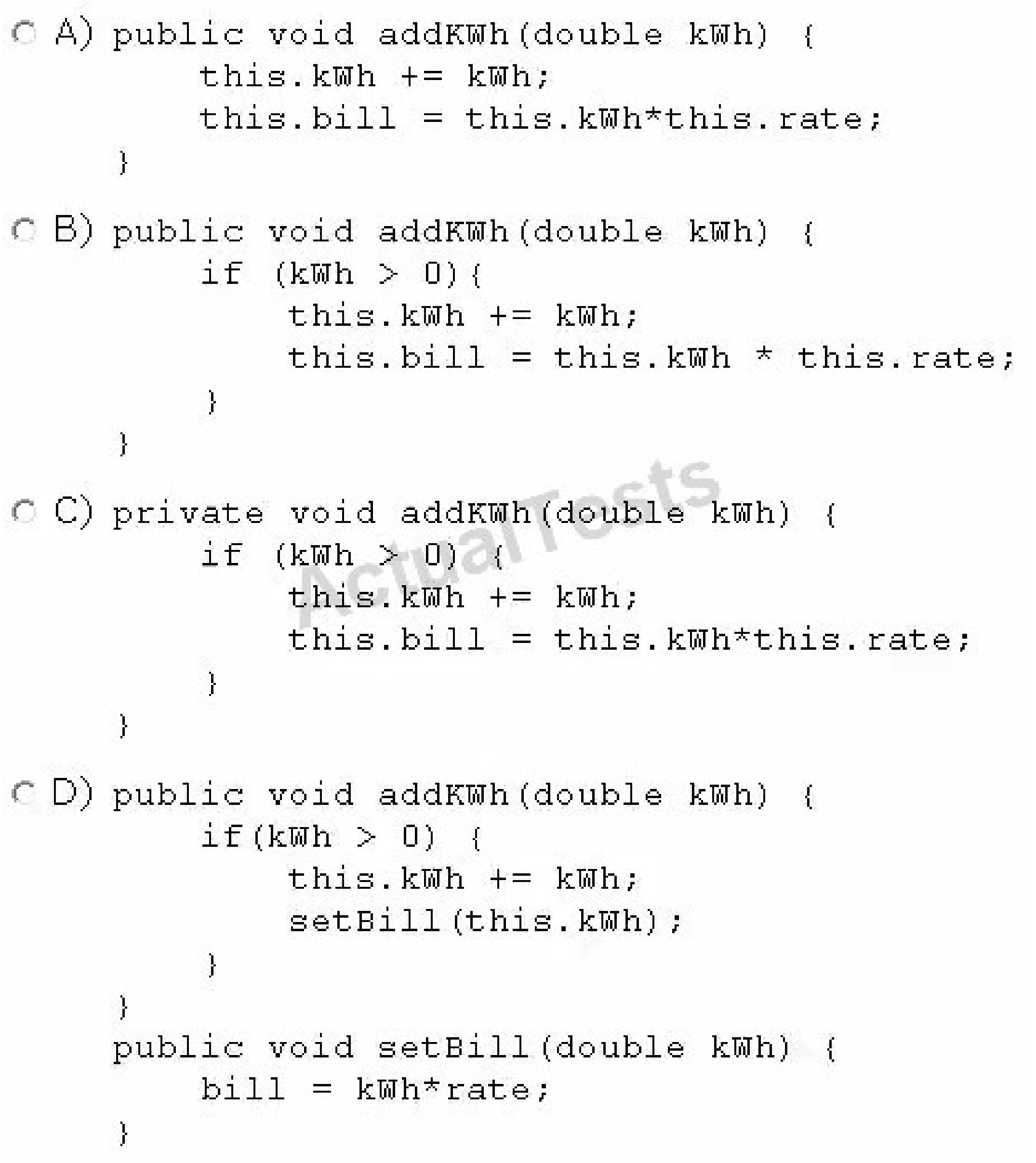
QUESTION NO: 4

Given the following two classes:



```
public class Customer {
    ElectricAccount acct = new ElectricAccount();

    public void useElectricity(double kWh){
        acct.addKWh(kWh);
    }
}

public class ElectricAccount {
    private double kWh;
    private double rate = 0.07;
    private double bill;

    //line n1
}
```

How should you write methods in the ElectricAccount class at line n1 so that the member variable bill is always equal to the value of the member variable kwh multiplied by the member variable rate?
Any amount of electricity used by a customer (represented by an instance of the customer class) must contribute to the customer's bill (represented by the member variable bill) through the method use Electricity method. An instance of the customer class should never be able to tamper with or decrease the value of the member variable bill.



```
○ A) public void addKWh(double kWh) {
          this.kWh += kWh;
          this.bill = this.kWh*this.rate;
     }

○ B) public void addKWh(double kWh) {
          if (kWh > 0){
               this.kWh += kWh;
               this.bill = this.kWh * this.rate;
          }
     }

○ C) private void addKWh(double kWh) {
          if (kWh > 0) {
               this.kWh += kWh;
               this.bill = this.kWh*this.rate;
          }
     }

○ D) public void addKWh(double kWh) {
          if(kWh > 0) {
               this.kWh += kWh;
               setBill(this.kWh);
          }
     }
     public void setBill(double kWh) {
          bill = kWh*rate;
     }
```

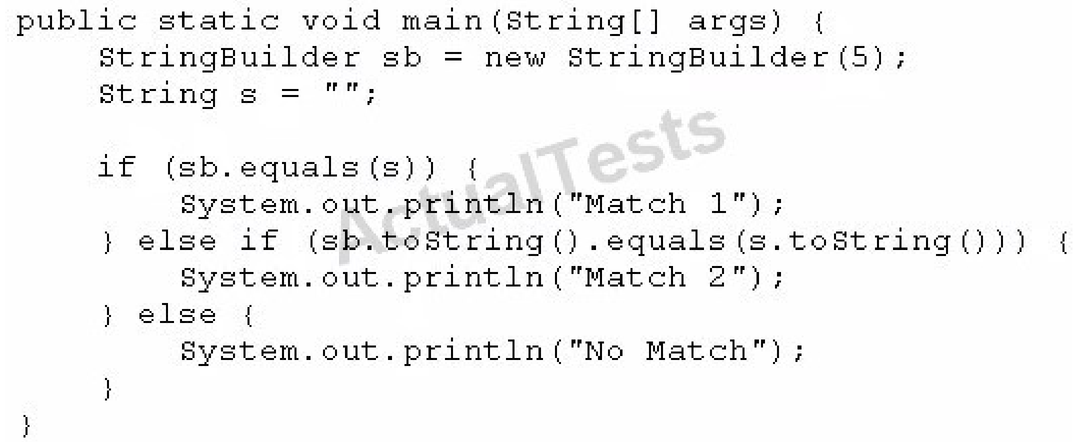
A. Option A

B. Option B

C. Option C

D. Option D

QUESTION NO: 5 Given the code fragment:



```
public static void main(String[] args) {
    StringBuilder sb = new StringBuilder(5);
    String s = "";

    if (sb.equals(s)) {
        System.out.println("Match 1");
    } else if (sb.toString().equals(s.toString())) {
        System.out.println("Match 2");
    } else {
        System.out.println("No Match");
    }
}
```

What is the result?

A. Match 1

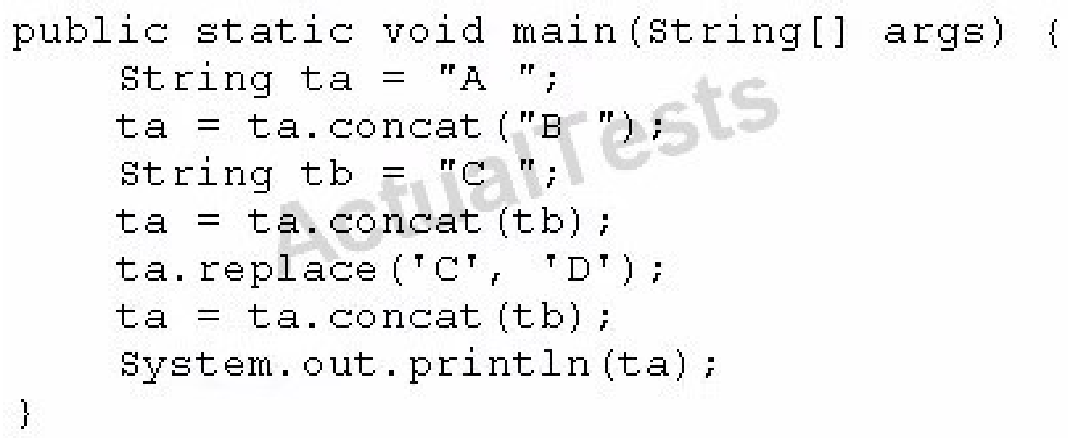
B. Match 2

C. No Match

D. A NullPointerException is thrown at runtime.

QUESTION NO: 6

Given:



```
public static void main(String[] args) {
     String ta = "A ";
     ta = ta.concat("B ");
     String tb = "C ";
     ta = ta.concat(tb);
     ta.replace('C', 'D');
     ta = ta.concat(tb);
     System.out.println(ta);
}
```

What is the result?

A. A B C D

B. A C D

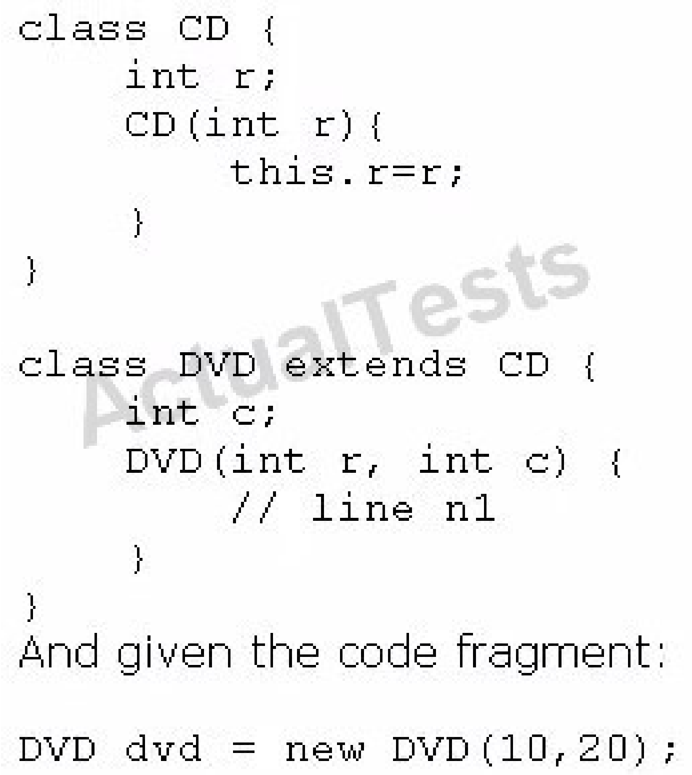
C. A B C C

D. A B D

E. A B D C

QUESTION NO: 7

Given:

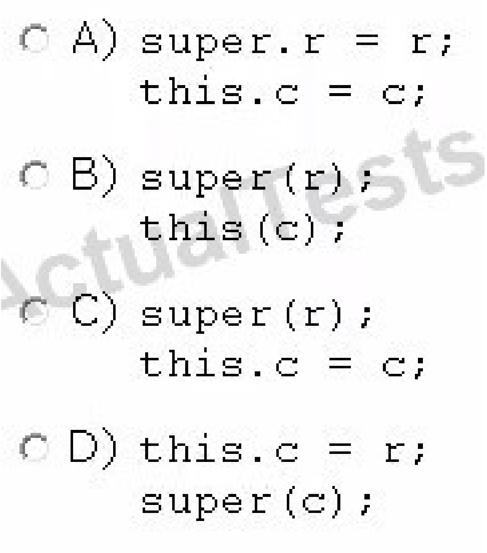


```
class CD {
    int r;
    CD(int r){
        this.r=r;
    }
}

class DVD extends CD {
    int c;
    DVD(int r, int c) {
        // line n1
    }
}
```

And given the code fragment:

```
DVD dvd = new DVD(10,20);
```

Which code fragment should you use at line n1 to instantiate the dvd object successfully?



```
○ A) super.r = r;
     this.c = c;

○ B) super(r);
     this(c);

○ C) super(r);
     this.c = c;

○ D) this.c = r;
     super(c);
```

A. Option A

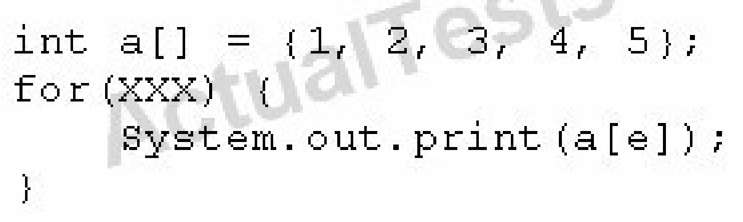
B. Option B

C. Option C

D. Option D

QUESTION NO: 8

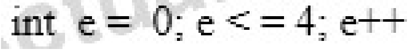
Given the code fragment:



```
int a[] = {1, 2, 3, 4, 5};
for(XXX) {
    System.out.print(a[e]);
}
```

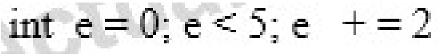
Which option can replace xxx to enable the code to print 135?

A.



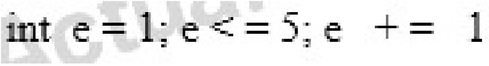
int e = 0; e < = 4; e++

B.



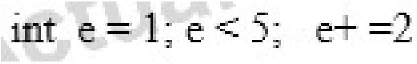
int e = 0; e < 5; e + = 2

C.



int e = 1; e < = 5; e + = 1

D.



int e = 1; e < 5; e+ =2

QUESTION NO: 9

Which statement best describes encapsulation?

A.

Encapsulation ensures that classes can bedesigned so that only certain fields and methods of an object are accessible from other objects.

B.

Encapsulation ensures that classes can be designed so that their methods are inheritable.

C.

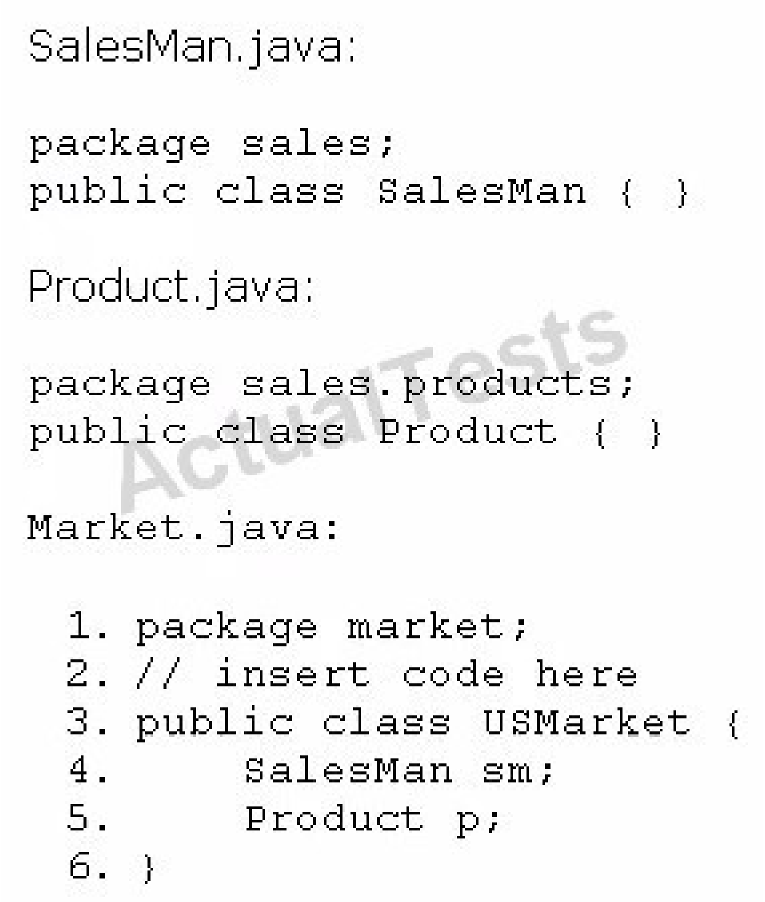
Encapsulation ensures that classes can be designed with some fields and methods declared as abstract.

D.

Encapsulation ensures that classes can be designed so that if a method has an argument MyType x, any subclass of MyType can be passed to that method.

QUESTION NO: 10

Given the code fragment from three files:



SalesMan.java:

```
package sales;
public class SalesMan { }
```

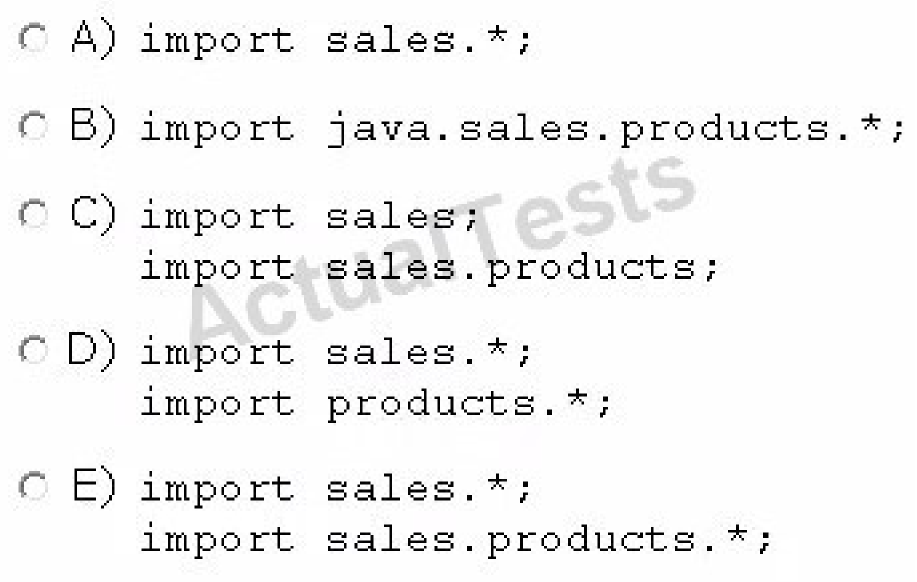
Product.java:

```
package sales.products;
public class Product { }
```

Market.java:

```
  1. package market;
  2. // insert code here
  3. public class USMarket {
  4.     SalesMan sm;
  5.     Product p;
  6. }
```

Which code fragment, when inserted at line 2, enables the code to compile?



```
○ A) import sales.*;

○ B) import java.sales.products.*;

○ C) import sales;
     import sales.products;

○ D) import sales.*;
     import products.*;

○ E) import sales.*;
     import sales.products.*;
```

A. Option A

B. Option B

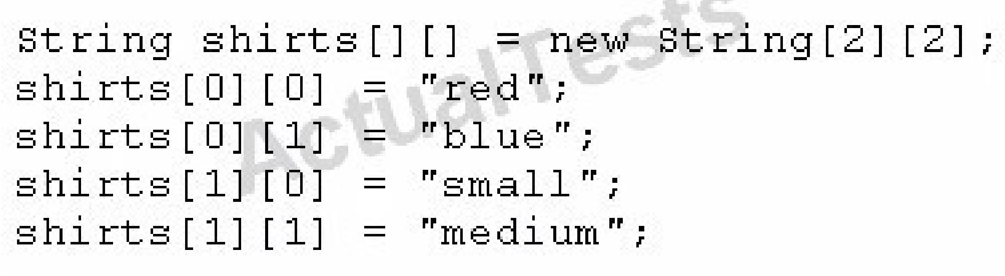
C. Option C

D. Option D

E. Option E

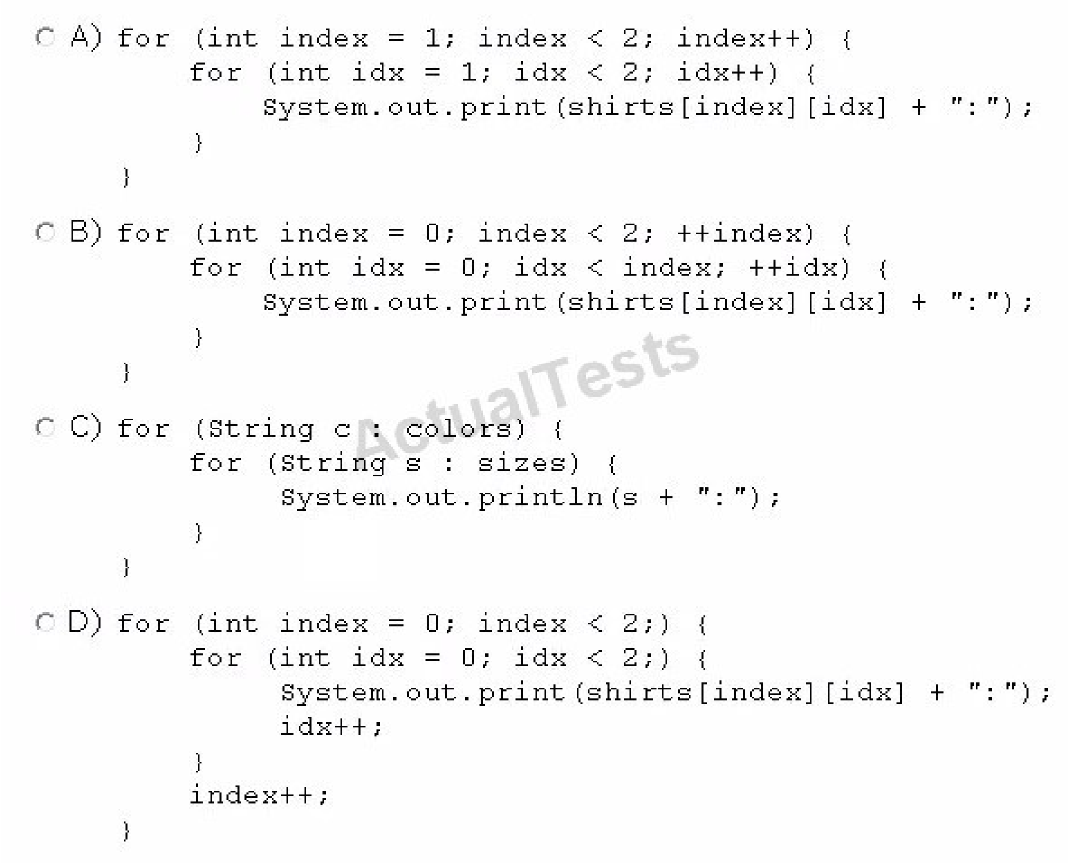
QUESTION NO: 11

Given the code fragment:



```
String shirts[][] = new String[2][2];
shirts[0][0] = "red";
shirts[0][1] = "blue";
shirts[1][0] = "small";
shirts[1][1] = "medium";
```

Which code fragment prints red: blue: small: medium?



```
○ A) for (int index = 1; index < 2; index++) {
          for (int idx = 1; idx < 2; idx++) {
              System.out.print(shirts[index][idx] + ":");
          }
      }
○ B) for (int index = 0; index < 2; ++index) {
          for (int idx = 0; idx < index; ++idx) {
              System.out.print(shirts[index][idx] + ":");
          }
      }
○ C) for (String c : colors) {
          for (String s : sizes) {
               System.out.println(s + ":");
          }
      }
○ D) for (int index = 0; index < 2;) {
          for (int idx = 0; idx < 2;) {
               System.out.print(shirts[index][idx] + ":");
               idx++;
          }
          index++;
      }
```

A. Option A

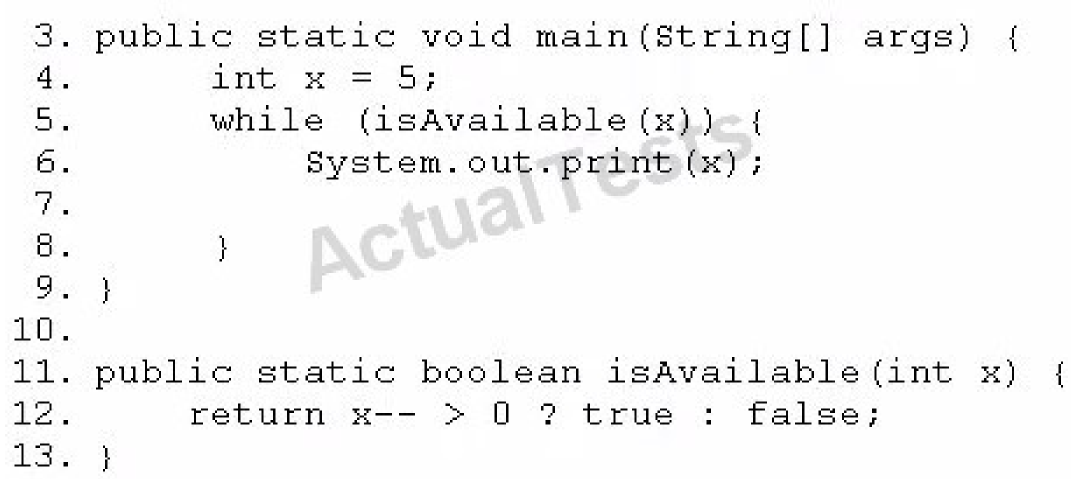
B. Option B

C. Option C

D. Option D

QUESTION NO: 12

Given the code fragment:



```
 3. public static void main(String[] args) {
 4.       int x = 5;
 5.       while (isAvailable(x)) {
 6.           System.out.print(x);
 7.
 8.       }
 9. }
10.
11. public static boolean isAvailable(int x) {
12.      return x-- > 0 ? true : false;
13. }
```

Which modification enables the code to print 54321?

A. Replace line 6 with System, out. print (--x) ;

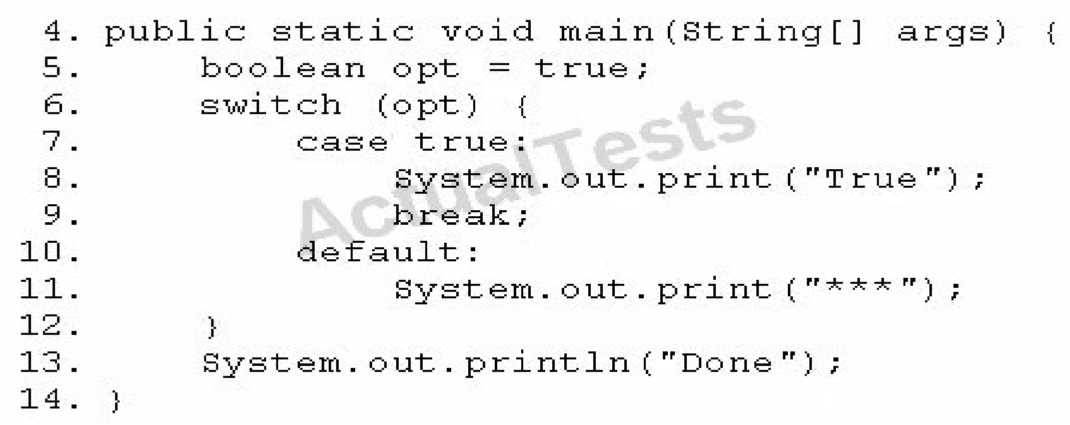
B. At line 7, insert x --;

C. Replace line 6 with --x; and, at line 7, insert system, out. print (x);

D. Replace line 12 With return (x > 0) ? false: true;

QUESTION NO: 13

Given the code fragment:



```
 4. public static void main(String[] args) {
 5.     boolean opt = true;
 6.     switch (opt) {
 7.         case true:
 8.             System.out.print("True");
 9.             break;
10.         default:
11.             System.out.print("***");
12.     }
13.     System.out.println("Done");
14. }
```

Which modification enables the code fragment to print TrueDone?

A. Replace line 5 With String opt = "true"; Replace line 7 with case "true":

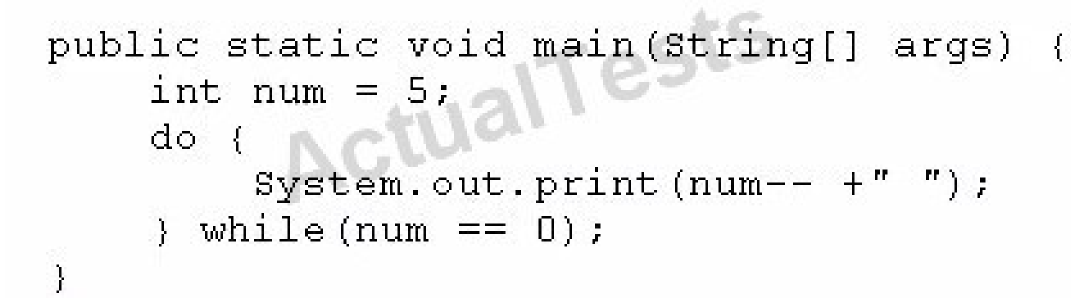
B. Replace line 5 with boolean opt = l; Replace line 7 with case 1=

C. At line 9, remove the break statement.

D. Remove the default section.

QUESTION NO: 14

Given the following main method:



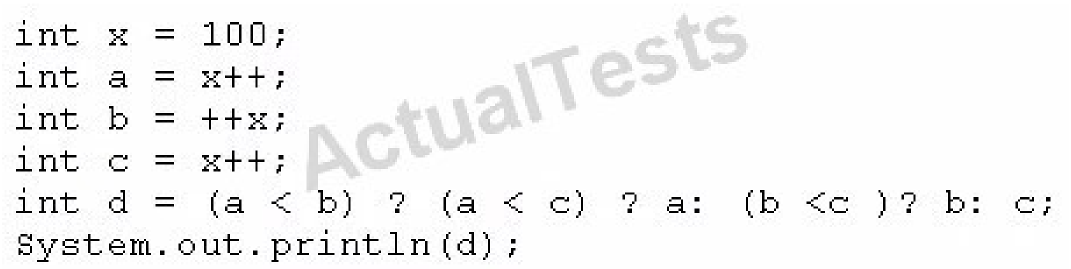
```
public static void main(String[] args) {
     int num = 5;
     do {
         System.out.print(num-- +" ");
     } while(num == 0);
}
```

What is the result?

A. 5 4 3 2 1 0
B. 5 4 3 2 1
C. 4 2 1
D. 5
E. Nothing is printed

QUESTION NO: 15

Given the code fragment:



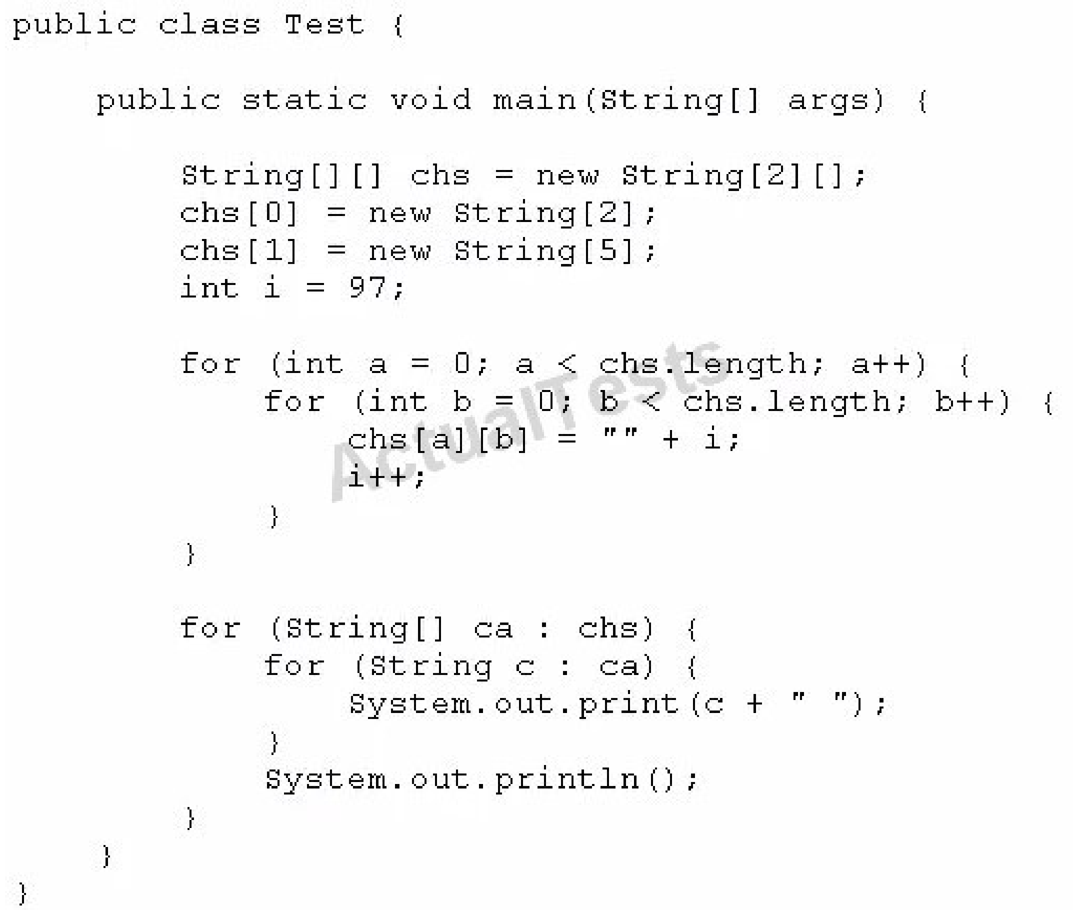
```
int x = 100;
int a = x++;
int b = ++x;
int c = x++;
int d = (a < b) ? (a < c) ? a: (b <c )? b: c;
System.out.println(d);
```

What is the result?

A. 100
B. 101
C. 102
D.103
E. Compilation fails

QUESTION NO: 16

Given:



```
public class Test {

    public static void main(String[] args) {

        String[][] chs = new String[2][];
        chs[0] = new String[2];
        chs[1] = new String[5];
        int i = 97;

        for (int a = 0; a < chs.length; a++) {
            for (int b = 0; b < chs.length; b++) {
                chs[a][b] = "" + i;
                i++;
            }
        }

        for (String[] ca : chs) {
            for (String c : ca) {
                System.out.print(c + " ");
            }
            System.out.println();
        }
    }
}
```

What is the result?

A.
97 98
99 100 null null null

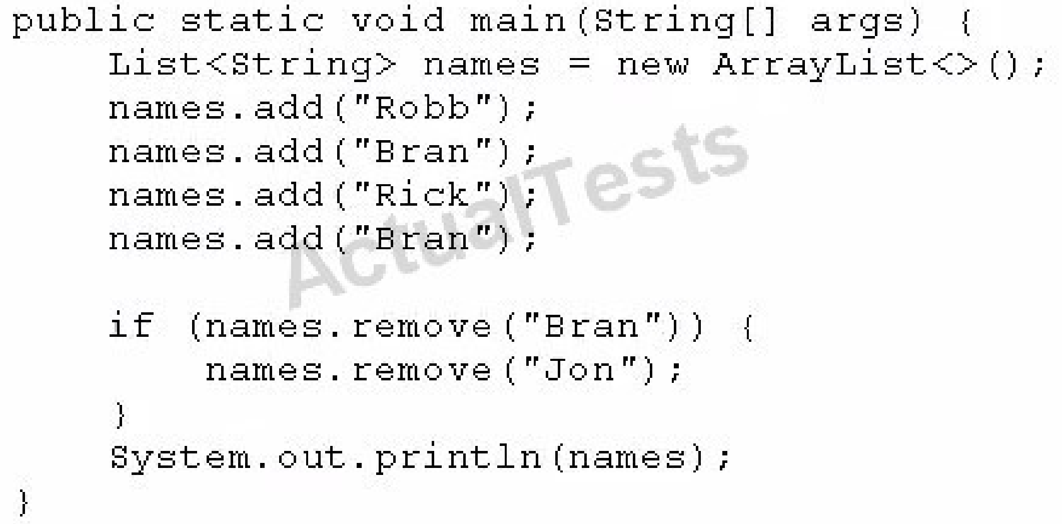
B.
97 98
99 100 101 102 103

C. Compilation rails.

D. A NullPointerException is thrown at runtime.

E. An ArrayIndexOutOfBoundsException is thrown at runtime.

QUESTION NO: 17 Given the code fragment:

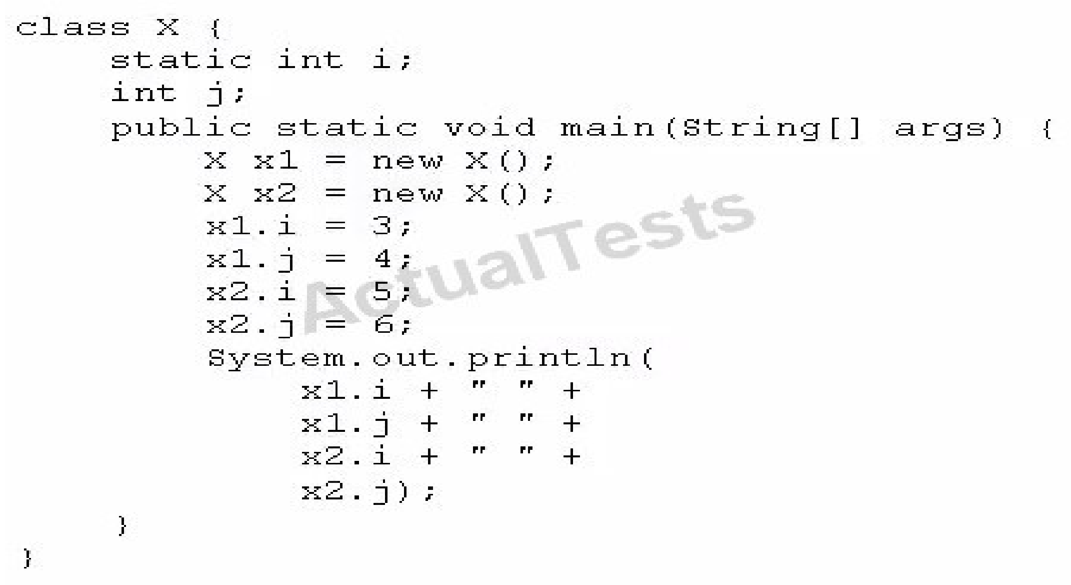


```
public static void main(String[] args) {
    List<String> names = new ArrayList<>();
    names.add("Robb");
    names.add("Bran");
    names.add("Rick");
    names.add("Bran");

    if (names.remove("Bran")) {
        names.remove("Jon");
    }
    System.out.println(names);
}
```

What is the result?

A. [Robb, Rick, Bran]
B. [Robb, Rick]
C. [Robb, Bran,Rick, Bran]
D. An exception is thrown at runtime.

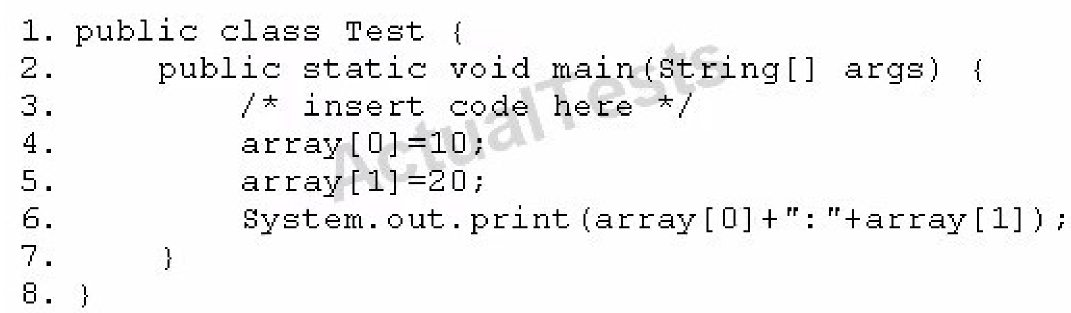
QUESTION NO: 18
Given:



```
class X {
     static int i;
     int j;
     public static void main(String[] args) {
          X x1 = new X();
          X x2 = new X();
          x1.i = 3;
          x1.j = 4;
          x2.i = 5;
          x2.j = 6;
          System.out.println(
               x1.i + " " +
               x1.j + " " +
               x2.i + " " +
               x2.j);
     }
}
```

What is the result?
A. 3 4 5 6
B. 34 3 6
C. 5 4 5 6
D. 3 6 4 6

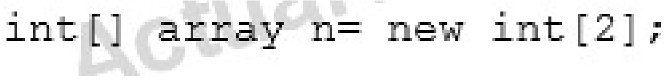
QUESTION NO: 19
Given the code fragment:



```
1. public class Test {
2.     public static void main(String[] args) {
3.         /* insert code here */
4.         array[0]=10;
5.         array[1]=20;
6.         System.out.print(array[0]+":"+array[1]);
7.     }
8. }
```

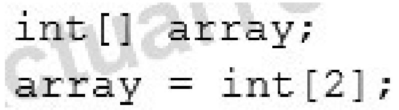
Which code fragment, when inserted at line 3, enables the code to print 10:20?

A.



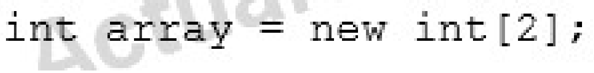
```
int[] array n= new int[2];
```

B.



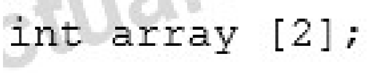
```
int[] array;
array = int[2];
```

C.



```
int array = new int[2];
```

D.



```
int array [2];
```

QUESTION NO: 20

Which three are advantages of the Java exception mechanism?

A.
Improves the program structure because the error handling code is separated from the normal program function

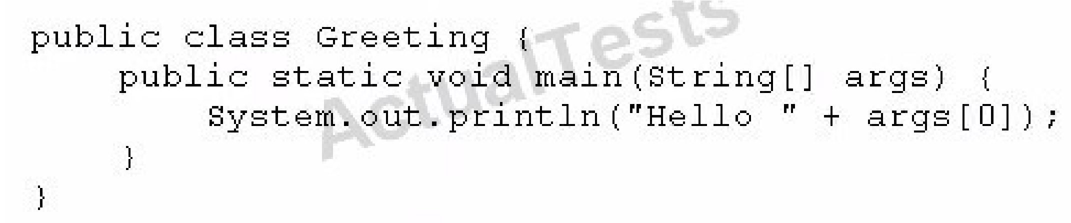
B.
Provides a set of standard exceptions that covers all the possible errors

C.
Improves the program structure because the programmer can choose where to handle exceptions

D.
Improves the program structure because exceptions must be handled in the method in which they occurred

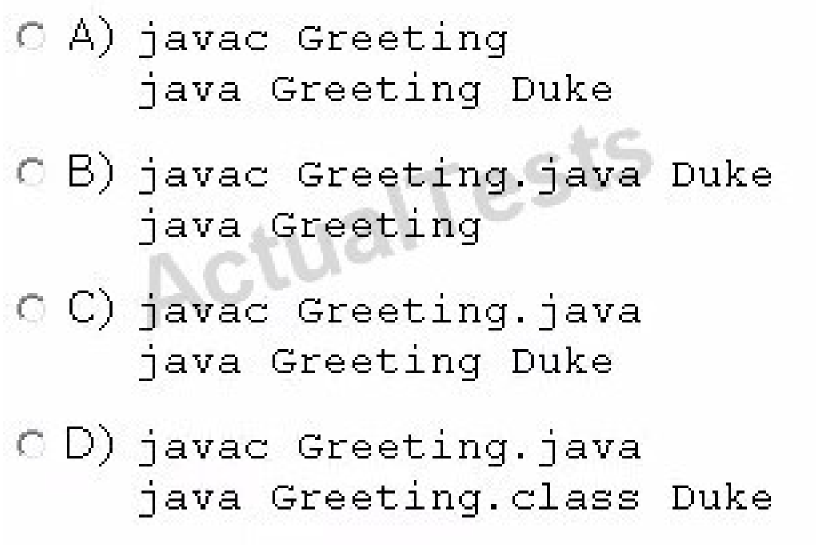
E.
Allows the creation of new exceptions that are tailored to the particular program being created

QUESTION NO: 21
Given the code from the Greeting.Java file:



```
public class Greeting {
    public static void main(String[] args) {
        System.out.println("Hello " + args[0]);
    }
}
```

Which set of commands prints Hello Duke in the console?

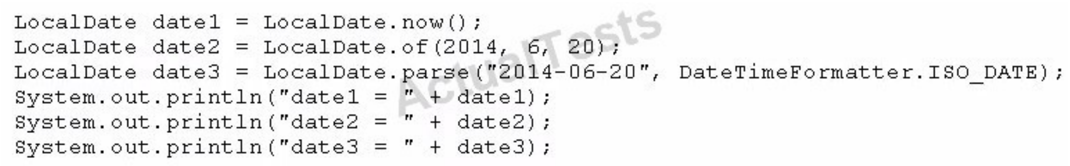


```
○ A) javac Greeting
     java Greeting Duke

○ B) javac Greeting.java Duke
     java Greeting

○ C) javac Greeting.java
     java Greeting Duke

○ D) javac Greeting.java
     java Greeting.class Duke
```

A. Option A
B. Option B
C. Option C
D. Option D

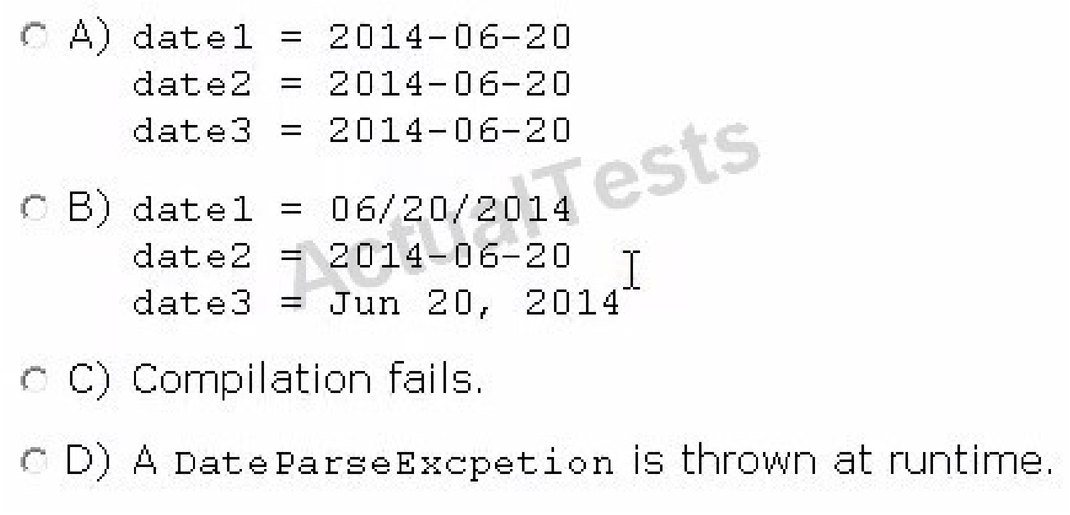
QUESTION NO: 22

Given the code fragment:



```
LocalDate date1 = LocalDate.now();
LocalDate date2 = LocalDate.of(2014, 6, 20);
LocalDate date3 = LocalDate.parse("2014-06-20", DateTimeFormatter.ISO_DATE);
System.out.println("date1 = " + date1);
System.out.println("date2 = " + date2);
System.out.println("date3 = " + date3);
```

Assume that the system date is June 20, 2014. What is the result?



```
○ A) date1 = 2014-06-20
     date2 = 2014-06-20
     date3 = 2014-06-20

○ B) date1 = 06/20/2014
     date2 = 2014-06-20
     date3 = Jun 20, 2014
```

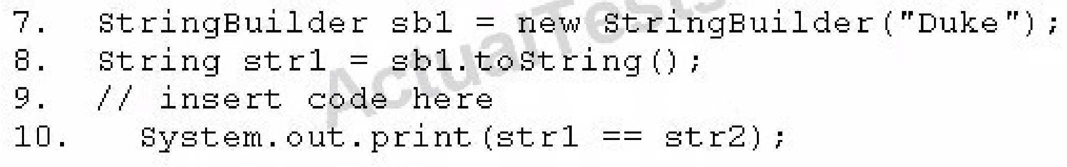
○ C) Compilation fails.

○ D) A `DateParseExcpetion` is thrown at runtime.

A. Option A
B. Option B
C. Option C
D. Option D

QUESTION NO: 23

Given the code fragment:



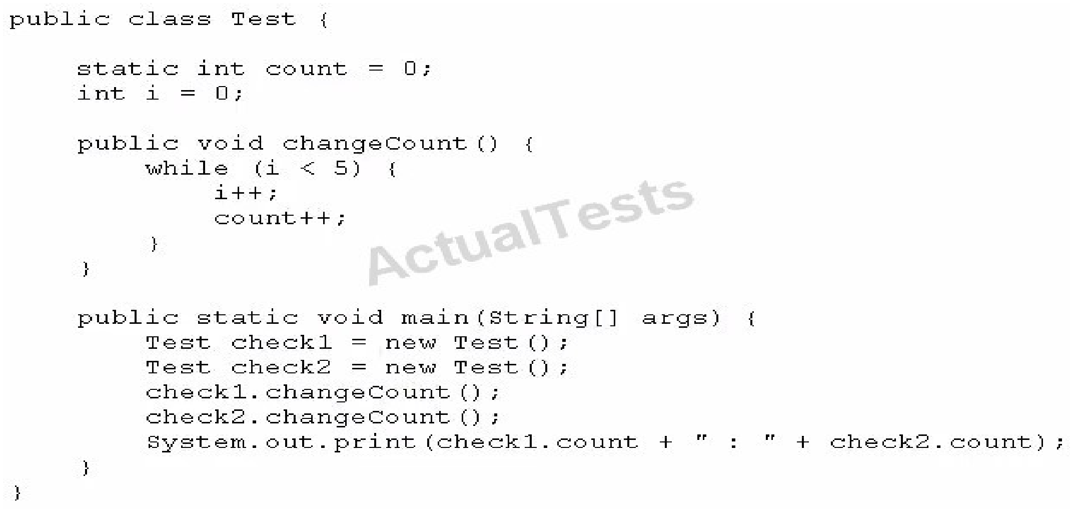
```
7.   StringBuilder sb1 = new StringBuilder("Duke");
8.   String str1 = sb1.toString();
9.   // insert code here
10.    System.out.print(str1 == str2);
```

Which code fragment, when inserted at line 9, enables the code to print true?

A. String str2 = str1;
B. String str2 = new String (str1);
C. String str2 = sb1. toString ();
D. String str2 = "Duke";

QUESTION NO: 24

Given the code fragment:



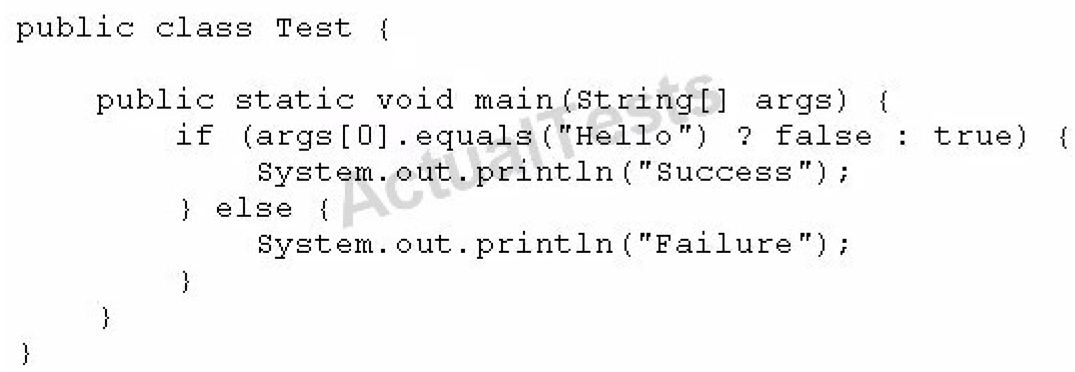
```
public class Test {

    static int count = 0;
    int i = 0;

    public void changeCount() {
        while (i < 5) {
            i++;
            count++;
        }
    }

    public static void main(String[] args) {
        Test check1 = new Test();
        Test check2 = new Test();
        check1.changeCount();
        check2.changeCount();
        System.out.print(check1.count + " : " + check2.count);
    }
}
```

What is the result?

A. 10 : 10
B. 5 : 5
C. 5 : 10
D. Compilation fails

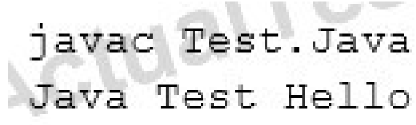
QUESTION NO: 25

Given:



```
public class Test {

    public static void main(String[] args) {
        if (args[0].equals("Hello") ? false : true) {
            System.out.println("Success");
        } else {
            System.out.println("Failure");
        }
    }
}
```

And given the commands:



```
javac Test.Java
Java Test Hello
```

What is the result?

A. Success
B. Failure
C. Compilation fails.
D. An exception is thrown at runtime

QUESTION NO: 26

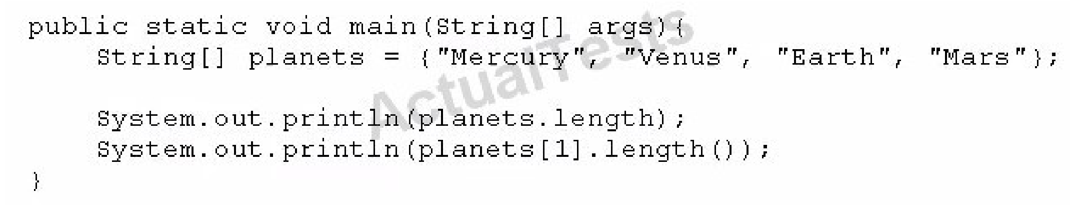
Which three statements describe the object-oriented features of the Java language?

A. Objects cannot be reused.
B. A subclass can inherit from a superclass.
C. Objects can share behaviors with other objects.
D. A package must contain more than one class.
E. Object is the root class of all other objects.

F. A main method must be declared in every class.

QUESTION NO: 27

Given the following code:



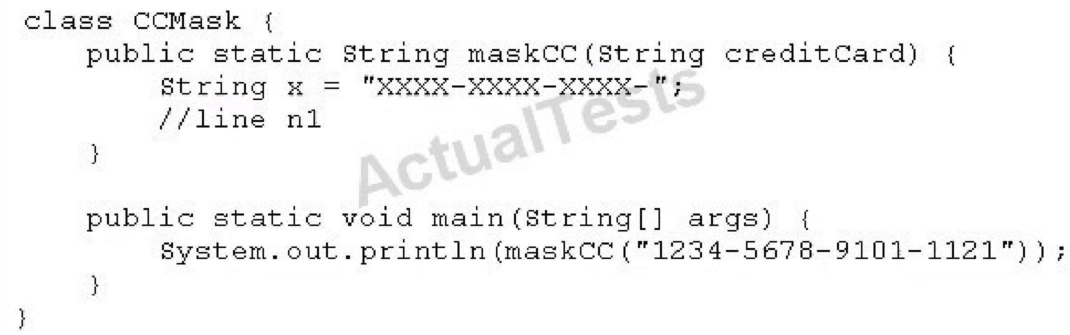
```
public static void main(String[] args){
     String[] planets = {"Mercury", "Venus", "Earth", "Mars"};

     System.out.println(planets.length);
     System.out.println(planets[1].length());
}
```

What is the output?

A. 4 4
B. 3 5
C. 4 7
D. 5 4
E. 4 5
F. 4 21

QUESTION NO: 28

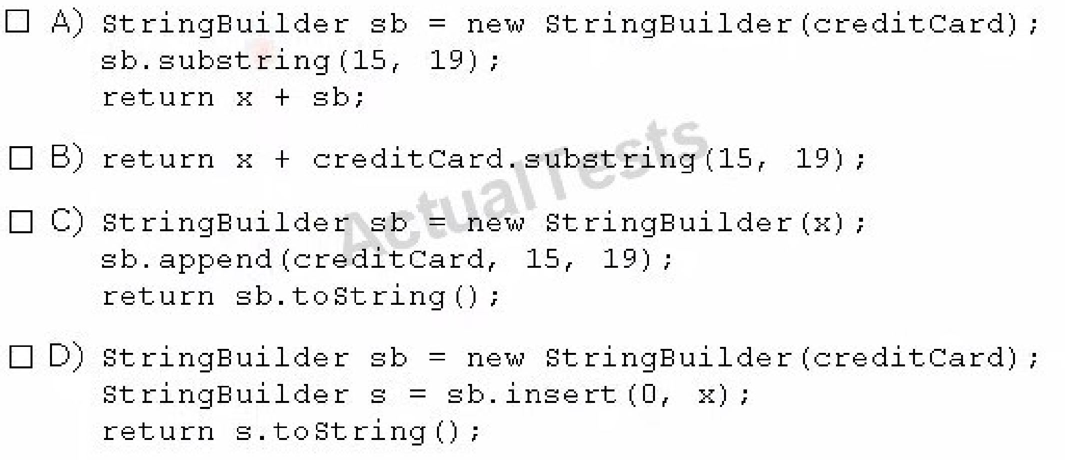
You are developing a banking module. You have developed a class named ccMask that has a maskcc method. Given the code fragment:



```
class CCMask {
    public static String maskCC(String creditCard) {
        String x = "XXXX-XXXX-XXXX-";
        //line n1
    }

    public static void main(String[] args) {
        System.out.println(maskCC("1234-5678-9101-1121"));
    }
}
```

You must ensure that the maskcc method returns a string that hides all digits of the credit card number except the four last digits (and the hyphens that separate each group of four digits).

Which two code fragments should you use at line n1, independently, to achieve this requirement?

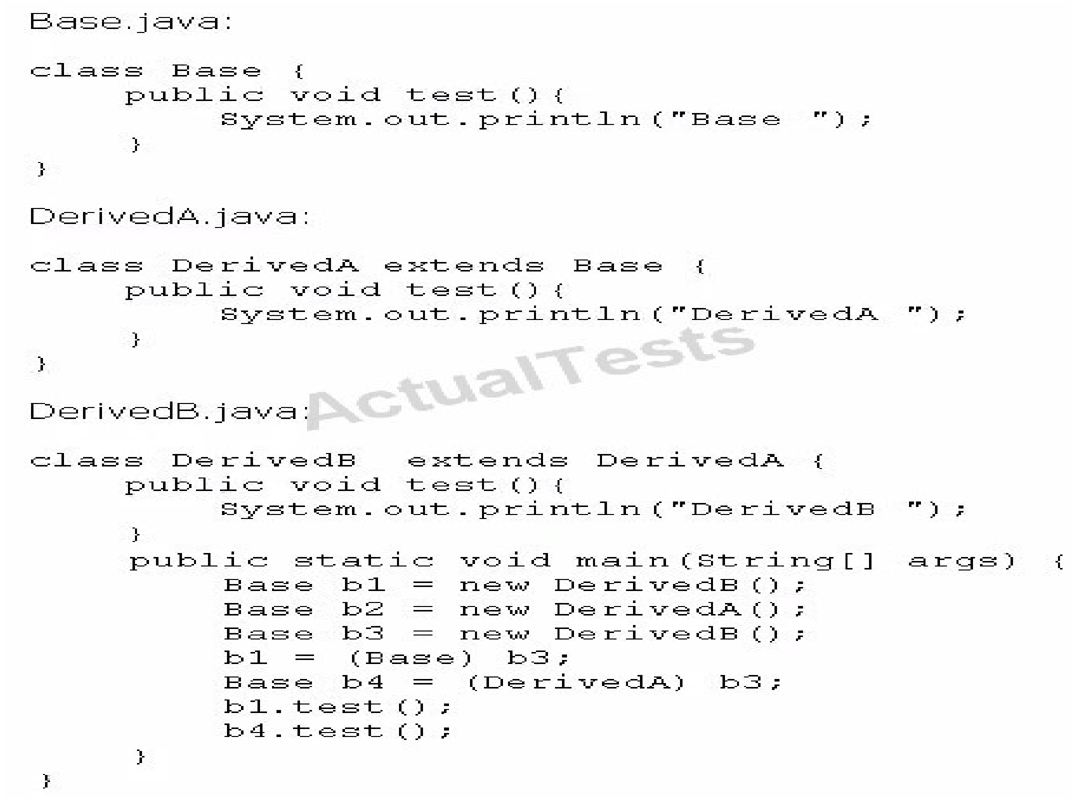


```
□ A) StringBuilder sb = new StringBuilder(creditCard);
     sb.substring(15, 19);
     return x + sb;

□ B) return x + creditCard.substring(15, 19);

□ C) StringBuilder sb = new StringBuilder(x);
     sb.append(creditCard, 15, 19);
     return sb.toString();

□ D) StringBuilder sb = new StringBuilder(creditCard);
     StringBuilder s = sb.insert(0, x);
     return s.toString();
```

A. Option A
B. Option B
C. Option C
D. Option D

QUESTION NO: 29

Given:



```
Base.java:

class Base {
     public void test(){
          System.out.println("Base ");
     }
}

DerivedA.java:

class DerivedA extends Base {
     public void test(){
          System.out.println("DerivedA ");
     }
}

DerivedB.java:

class DerivedB  extends DerivedA {
     public void test(){
          System.out.println("DerivedB ");
     }
     public static void main(String[] args) {
          Base b1 = new DerivedB();
          Base b2 = new DerivedA();
          Base b3 = new DerivedB();
          b1 = (Base) b3;
          Base b4 = (DerivedA) b3;
          b1.test();
          b4.test();
     }
}
```

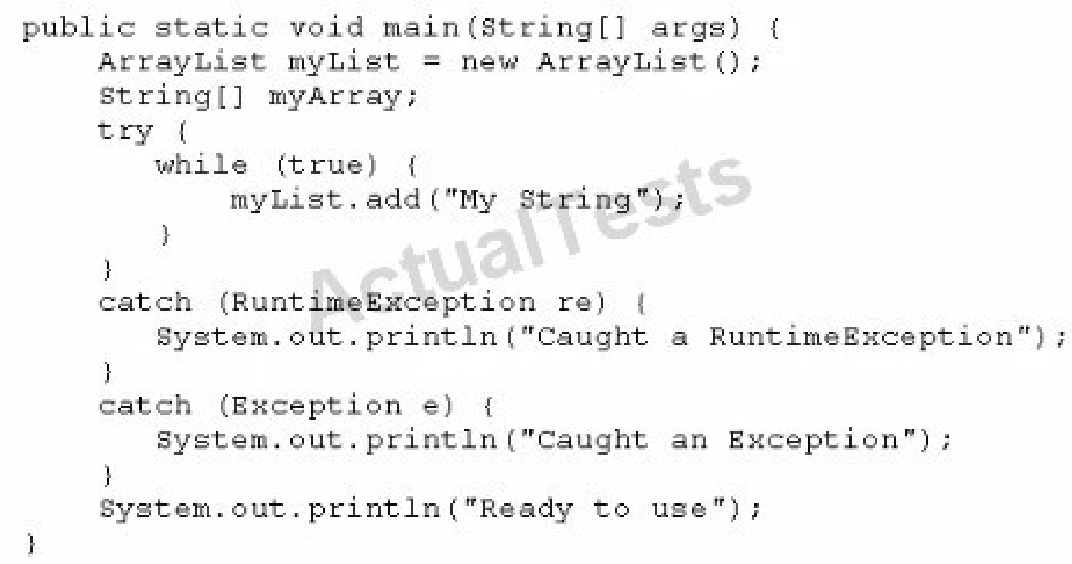
What is the result?

A. Base
DerivedA
B. Base
DerivedB
C. DerivedB
DerivedB
D. DerivedB
DerivedA

E. A classcast Exception is thrown at runtime.

QUESTION NO: 30

Given the code fragment:



```
public static void main(String[] args) {
    ArrayList myList = new ArrayList();
    String[] myArray;
    try {
       while (true) {
           myList.add("My String");
       }
    }
    catch (RuntimeException re) {
       System.out.println("Caught a RuntimeException");
    }
    catch (Exception e) {
       System.out.println("Caught an Exception");
    }
    System.out.println("Ready to use");
}
```

What is the result?

A.
Execution terminates in the firstcatch statement, and caught a RuntimeException is printed to the console.

B.
Execution terminates in the second catch statement, and caught an Exception is printed to the console.

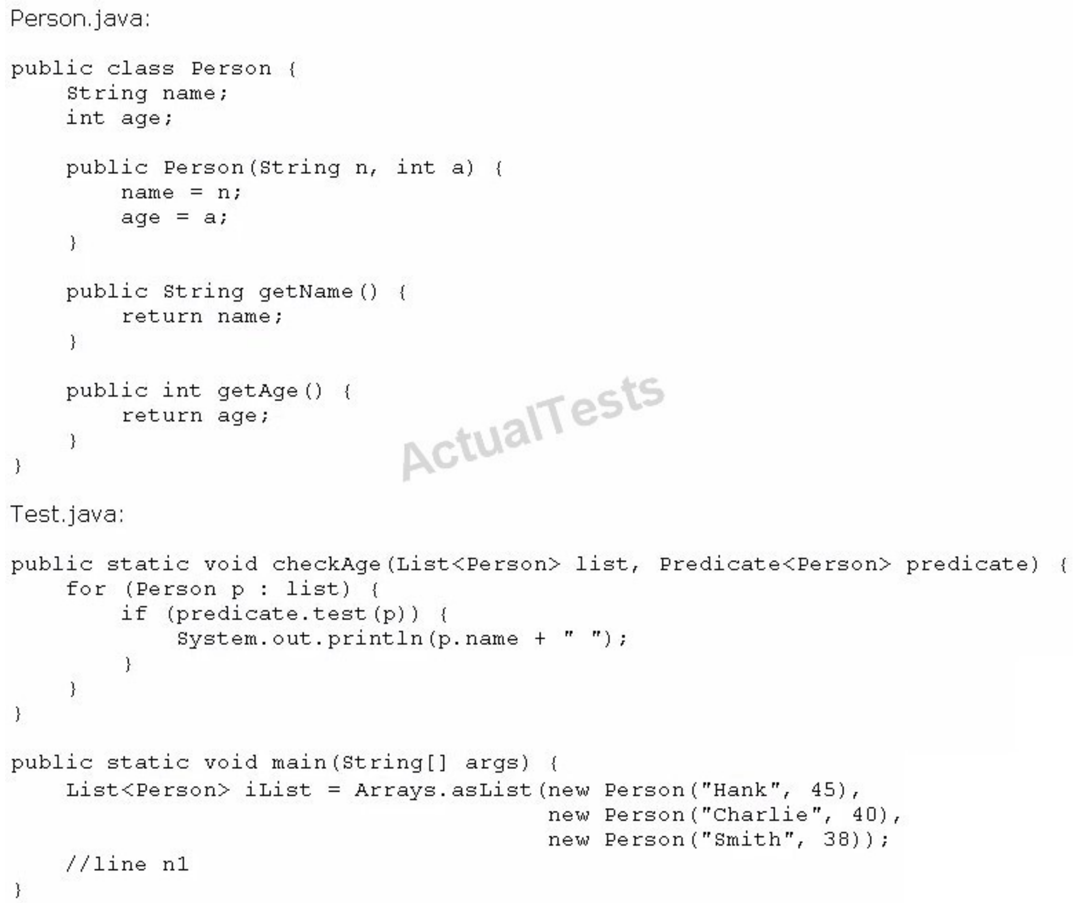
C.
A runtime error is thrown in the thread "main".

D.
Execution completes normally, and Ready to use is printed to the console.

E.
The code fails to compile because a throws keyword is required.

QUESTION NO: 31

Given the code fragments:



Person.java:

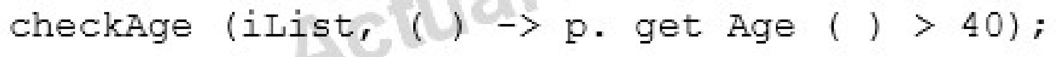
```
public class Person {
    String name;
    int age;

    public Person(String n, int a) {
        name = n;
        age = a;
    }

    public String getName() {
        return name;
    }

    public int getAge() {
        return age;
    }
}
```

Test.java:

```
public static void checkAge(List<Person> list, Predicate<Person> predicate) {
    for (Person p : list) {
        if (predicate.test(p)) {
            System.out.println(p.name + " ");
        }
    }
}

public static void main(String[] args) {
    List<Person> iList = Arrays.asList(new Person("Hank", 45),
                                       new Person("Charlie", 40),
                                       new Person("Smith", 38));
    //line n1
}
```

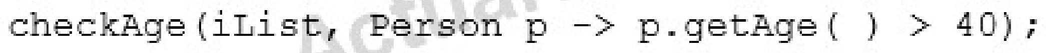
Which code fragment, when inserted at line n1, enables the code to print Hank?

A.



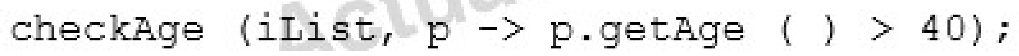
```
checkAge (iList, ( ) -> p. get Age ( ) > 40);
```

B.



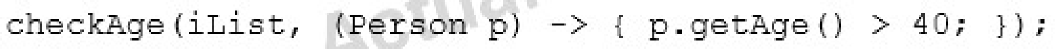
```
checkAge(iList, Person p -> p.getAge( ) > 40);
```

C.



```
checkAge (iList, p -> p.getAge ( ) > 40);
```

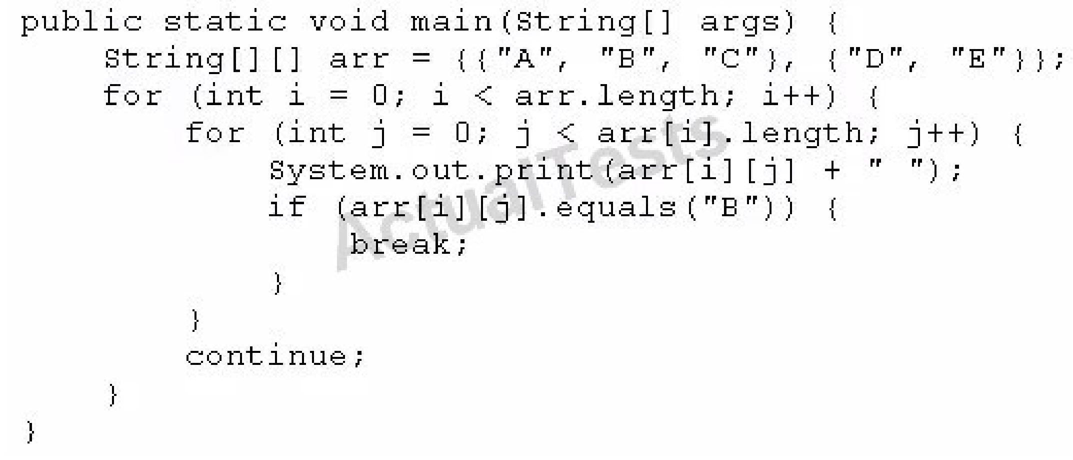
D.



```
checkAge(iList, (Person p) -> { p.getAge() > 40; });
```

QUESTION NO: 32

Given the code fragment:



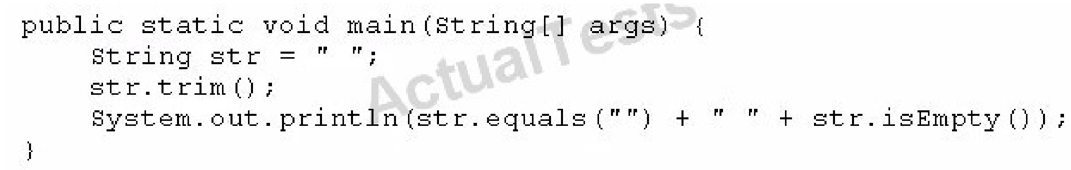
```
public static void main(String[] args) {
    String[][] arr = {{"A", "B", "C"}, {"D", "E"}};
    for (int i = 0; i < arr.length; i++) {
        for (int j = 0; j < arr[i].length; j++) {
            System.out.print(arr[i][j] + " ");
            if (arr[i][j].equals("B")) {
                break;
            }
        }
        continue;
    }
}
```

What is the result?

A. A B C
B. A B C D E
C. A B D E
D. Compilation fails.

QUESTION NO: 33

Given the code fragment:



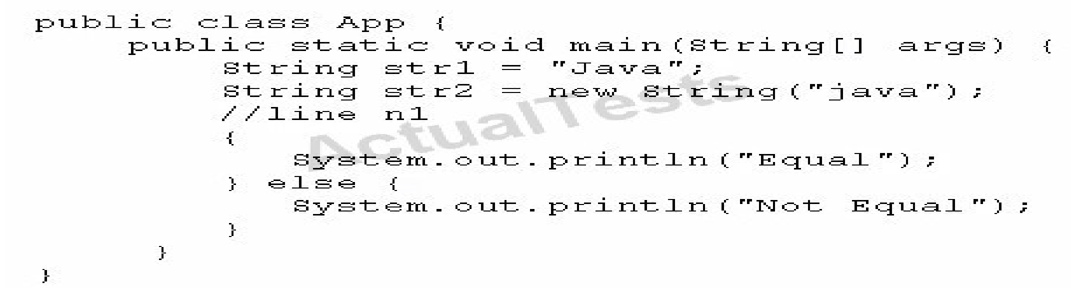
```
public static void main(String[] args) {
    String str = " ";
    str.trim();
    System.out.println(str.equals("") + " " + str.isEmpty());
}
```

What is the result?

A. true true
B. true false
C. false false
D. false true

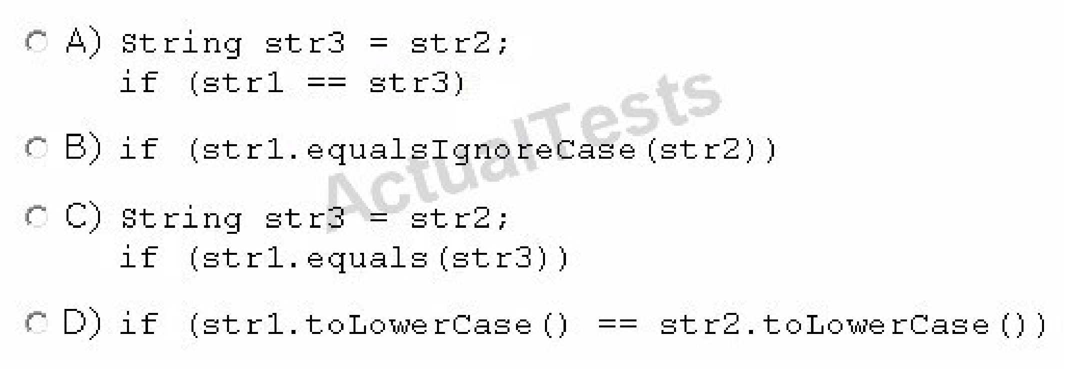
QUESTION NO: 34

Given the code fragment:



```
public class App {
    public static void main(String[] args) {
        String str1 = "Java";
        String str2 = new String("java");
        //line n1
        {
            System.out.println("Equal");
        } else {
            System.out.println("Not Equal");
        }
    }
}
```

Which code fragment, when inserted at line n1, enables the App class to print Equal?

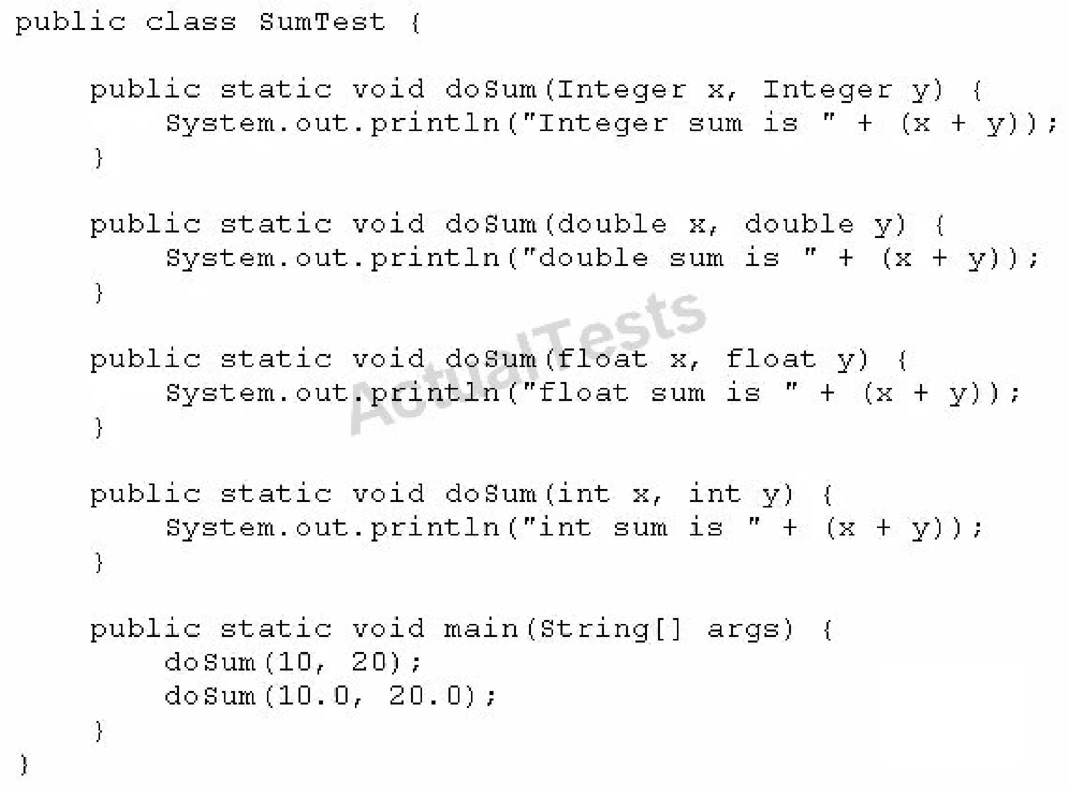


```
○ A) String str3 = str2;
     if (str1 == str3)

○ B) if (str1.equalsIgnoreCase(str2))

○ C) String str3 = str2;
     if (str1.equals(str3))

○ D) if (str1.toLowerCase() == str2.toLowerCase())
```

A. Option A
B. Option B
C. Option C
D. Option D

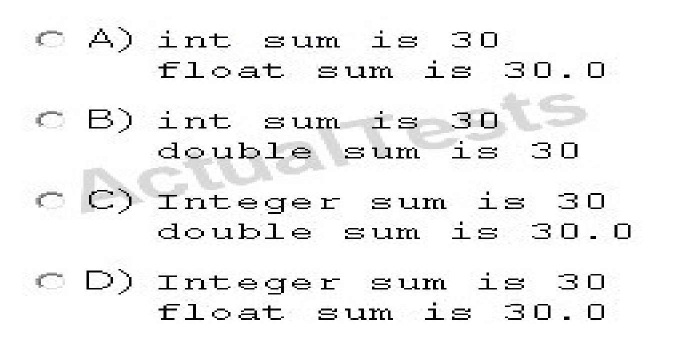
QUESTION NO: 35

Given:



```
public class SumTest {

    public static void doSum(Integer x, Integer y) {
        System.out.println("Integer sum is " + (x + y));
    }

    public static void doSum(double x, double y) {
        System.out.println("double sum is " + (x + y));
    }

    public static void doSum(float x, float y) {
        System.out.println("float sum is " + (x + y));
    }

    public static void doSum(int x, int y) {
        System.out.println("int sum is " + (x + y));
    }

    public static void main(String[] args) {
        doSum(10, 20);
        doSum(10.0, 20.0);
    }
}
```

What is the result?



○ A) int sum is 30
float sum is 30.0

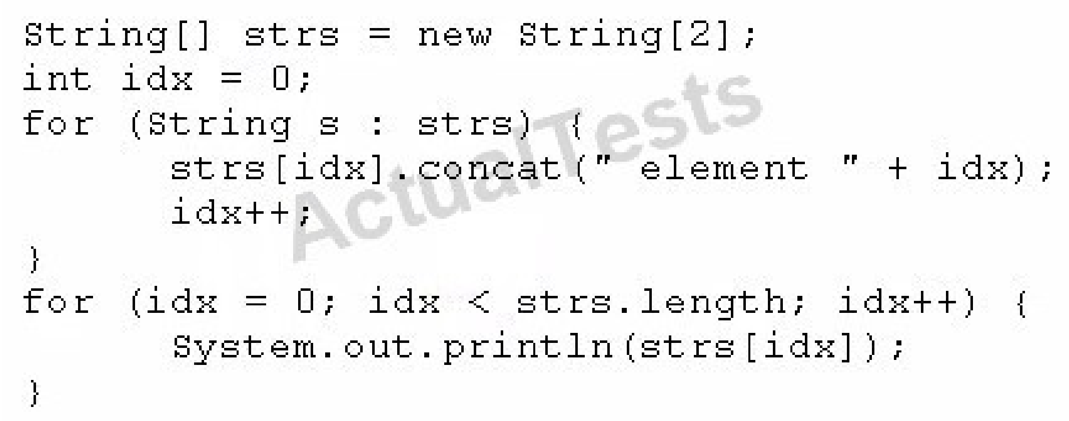
○ B) int sum is 30
double sum is 30

○ C) Integer sum is 30
double sum is 30.0

○ D) Integer sum is 30
float sum is 30.0

A. Option A
B. Option B
C. Option C
D. Option D

QUESTION NO: 36
Given the code fragment:



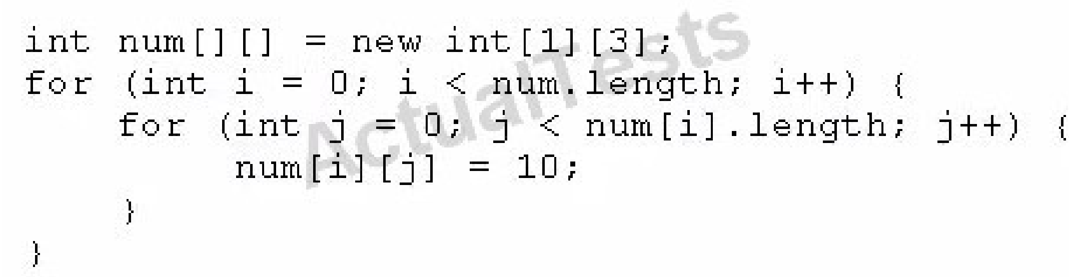
```
String[] strs = new String[2];
int idx = 0;
for (String s : strs) {
      strs[idx].concat(" element " + idx);
      idx++;
}
for (idx = 0; idx < strs.length; idx++) {
      System.out.println(strs[idx]);
}
```

What is the result?

A. Element 0
Element 1
B. Null element 0
Null element 1
C. Null
Null
D. A NullPointerException is thrown at runtime.

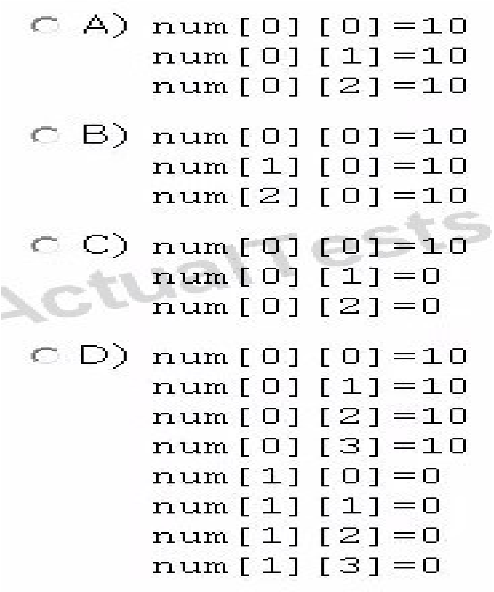
QUESTION NO: 37

Given the code fragment:



```
int num[][] = new int[1][3];
for (int i = 0; i < num.length; i++) {
    for (int j = 0; j < num[i].length; j++) {
         num[i][j] = 10;
    }
}
```

Which option represents the state of the num array after successful completion of the outer loop?



```
○ A) num[0][0]=10
     num[0][1]=10
     num[0][2]=10

○ B) num[0][0]=10
     num[1][0]=10
     num[2][0]=10

○ C) num[0][0]=10
     num[0][1]=0
     num[0][2]=0

○ D) num[0][0]=10
     num[0][1]=10
     num[0][2]=10
     num[0][3]=10
     num[1][0]=0
     num[1][1]=0
     num[1][2]=0
     num[1][3]=0
```

A. Option A
B. Option B
C. Option C
D. Option D

QUESTION NO: 38

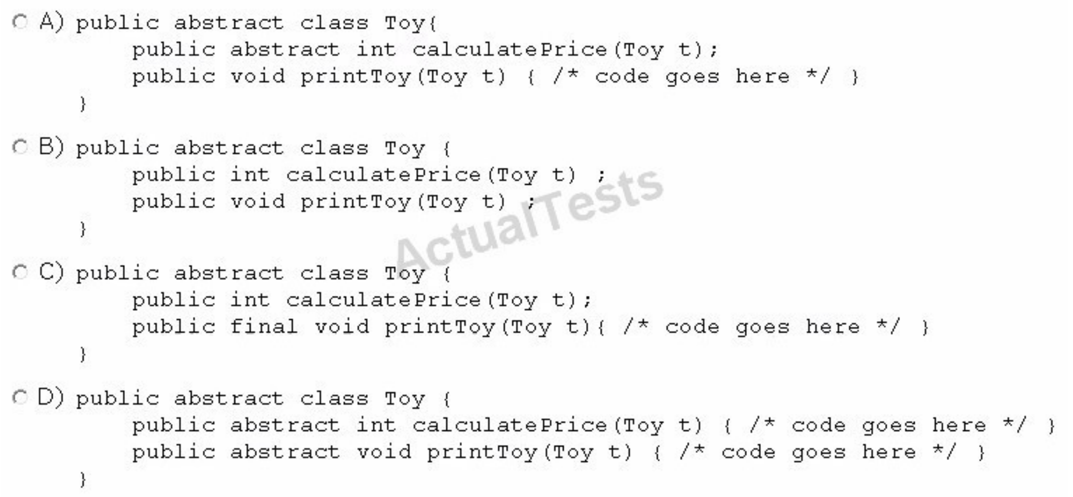
You are asked to develop a program for a shopping application, and you are given the following information:

The applicationmust contain the classes Toy, EduToy, and ConsToy. The Toy class is the superclass of the other two classes.

The int calculatePrice (Toy t) method calculates the price of a toy.

The void printToy (Toy t) method prints the details of a toy.

Which definition of the Toy class adds a valid layer of abstraction to the class hierarchy?

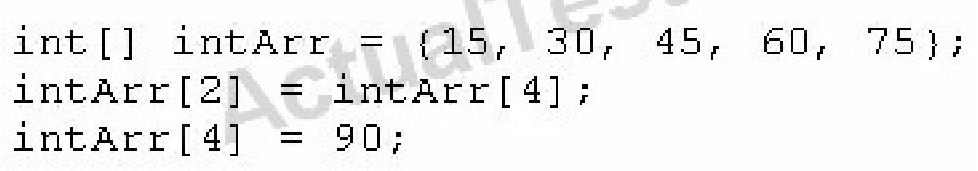


```
○ A) public abstract class Toy{
         public abstract int calculatePrice(Toy t);
         public void printToy(Toy t) { /* code goes here */ }
     }

○ B) public abstract class Toy {
         public int calculatePrice(Toy t) ;
         public void printToy(Toy t) ;
     }

○ C) public abstract class Toy {
         public int calculatePrice(Toy t);
         public final void printToy(Toy t){ /* code goes here */ }
     }

○ D) public abstract class Toy {
         public abstract int calculatePrice(Toy t) { /* code goes here */ }
         public abstract void printToy(Toy t) { /* code goes here */ }
     }
```

A. Option A
B. Option B
C. Option C
D. Option D

QUESTION NO: 39

Given the following code:



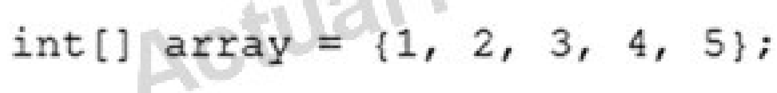
```
int[] intArr = {15, 30, 45, 60, 75};
intArr[2] = intArr[4];
intArr[4] = 90;
```

What are the values of each element in intArr after this code has executed?

A. 15, 60, 45, 90, 75
B. 15, 90, 45, 90, 75
C. 15, 30, 75, 60, 90
D. 15, 30, 90, 60, 90
E. 15, 4, 45, 60, 90

QUESTION NO: 40

Given the code fragment:



```
int[] array = {1, 2, 3, 4, 5};
```

And given the requirements:

1. Process all the elements of the array in the order of entry.

2. Process all the elements of the array in the reverse order of entry.

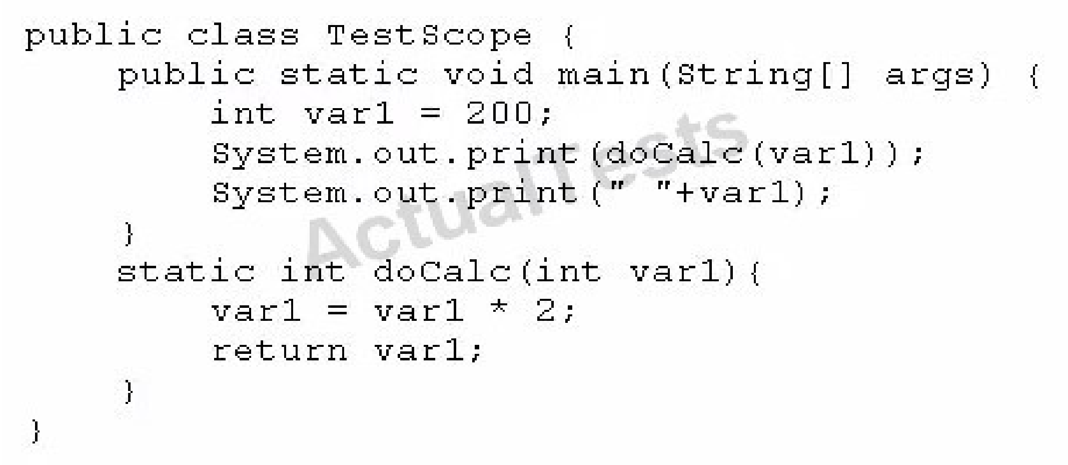
3. Process alternating elements of the array in the order of entry.

Which two statements are true?

A. Requirements 1, 2, and 3 can be implemented by using the enhanced for loop.
B. Requirements 1, 2, and 3 can be implemented by using the standard for loop.
C. Requirements 2 and 3 CANNOT be implemented by using the standard for loop.
D. Requirement 1 can be implemented by using the enhanced for loop.
E. Requirement 3 CANNOT be implemented by using either the enhanced for loop or the standard for loop.

QUESTION NO: 41

Given:



```
public class TestScope {
    public static void main(String[] args) {
        int var1 = 200;
        System.out.print(doCalc(var1));
        System.out.print(" "+var1);
    }
    static int doCalc(int var1){
        var1 = var1 * 2;
        return var1;
    }
}
```

What is the result?

A. 400 200
B. 200 200
C. 400 400
D. Compilation fails.

QUESTION NO: 42

Given the following class declarations:

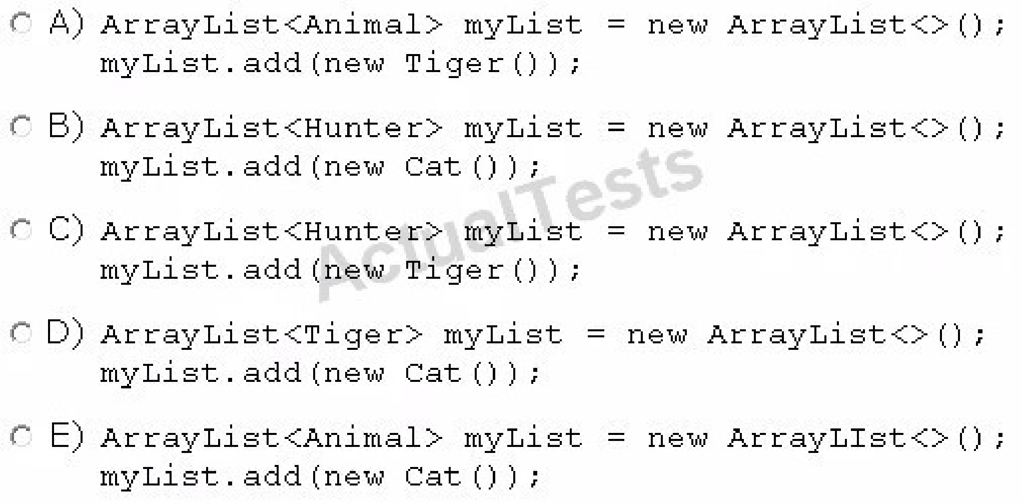
public abstract class Animal

public interface Hunter

public class Cat extends Animalimplements Hunter

public class Tiger extends Cat

Which answer fails to compile?



```
○ A) ArrayList<Animal> myList = new ArrayList<>();
     myList.add(new Tiger());

○ B) ArrayList<Hunter> myList = new ArrayList<>();
     myList.add(new Cat());

○ C) ArrayList<Hunter> myList = new ArrayList<>();
     myList.add(new Tiger());

○ D) ArrayList<Tiger> myList = new ArrayList<>();
     myList.add(new Cat());

○ E) ArrayList<Animal> myList = new ArrayLIst<>();
     myList.add(new Cat());
```

A. Option A

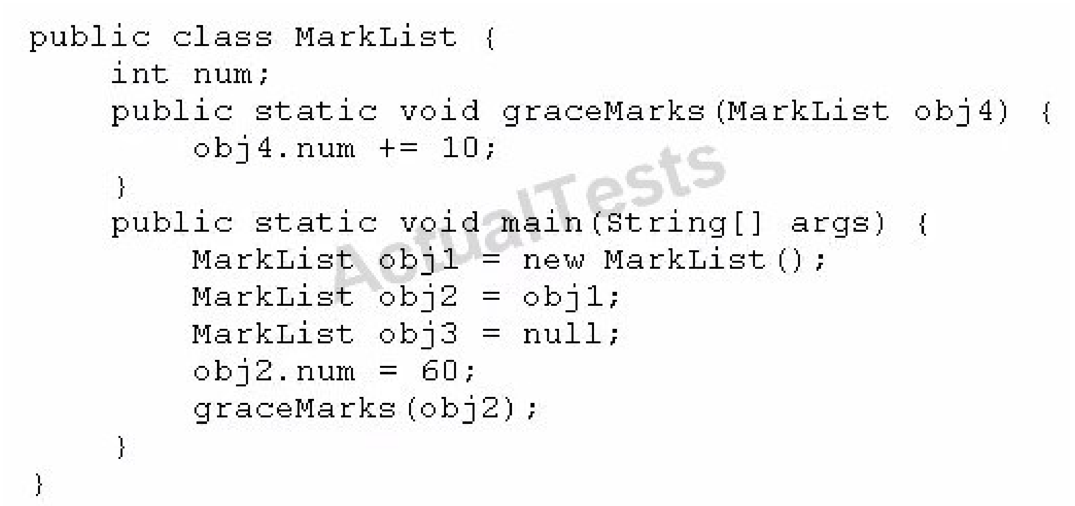
B. Option B
C. Option C
D. Option D
E. Option E

QUESTION NO: 43

Which statement is true about Java byte code?
A. It can run on any platform.
B. It can run on any platform only if it was compiled for that platform.
C. It can run on any platform that has the Java Runtime Environment.
D. It can run on any platform that has a Java compiler.
E. It can run on any platform only if that platform has both the Java Runtime Environment and a Java compiler.

QUESTION NO: 44

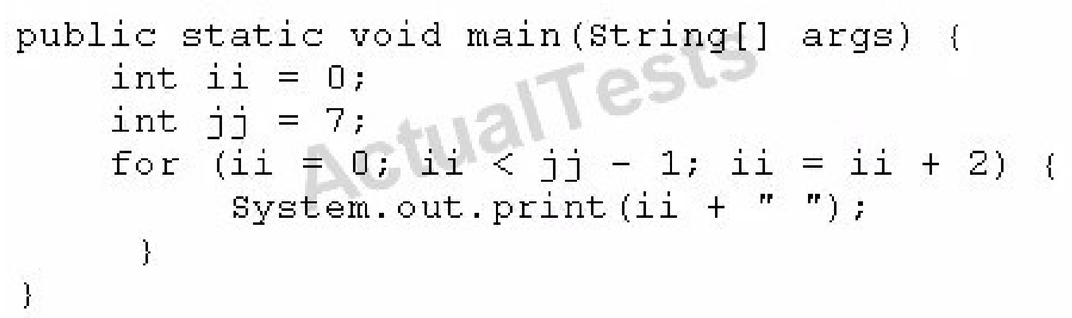
Given:



```
public class MarkList {
     int num;
     public static void graceMarks(MarkList obj4) {
         obj4.num += 10;
     }
     public static void main(String[] args) {
         MarkList obj1 = new MarkList();
         MarkList obj2 = obj1;
         MarkList obj3 = null;
         obj2.num = 60;
         graceMarks(obj2);
     }
 }
```

How many MarkList instances are created in memory at runtime?

A. 1
B. 2
C. 3
D. 4
QUESTION NO: 45
Given the code fragment:

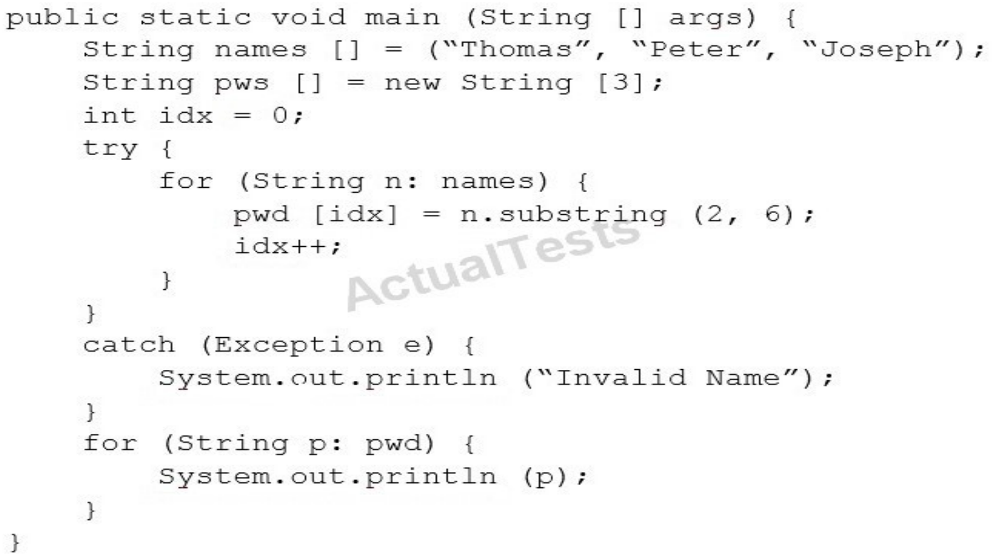


```
public static void main(String[] args) {
     int ii = 0;
     int jj = 7;
     for (ii = 0; ii < jj - 1; ii = ii + 2) {
          System.out.print(ii + " ");
       }
 }
```

What is the result?
A. 2 4
B. 0 2 4 6
C. 0 24

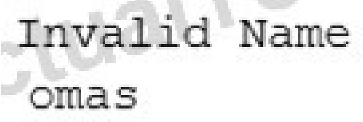
D. Compilation fails

QUESTION NO: 46
Given the code fragment:



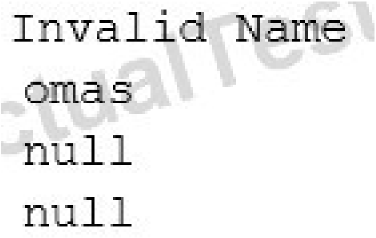
```
public static void main (String [] args) {
    String names [] = (“Thomas”, “Peter”, “Joseph”);
    String pws [] = new String [3];
    int idx = 0;
    try {
        for (String n: names) {
            pwd [idx] = n.substring (2, 6);
            idx++;
        }
    }
    catch (Exception e) {
        System.out.println (“Invalid Name”);
    }
    for (String p: pwd) {
        System.out.println (p);
    }
}
```

What is the result?
A. Invalid Name
B.



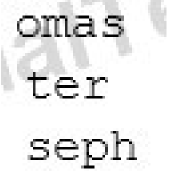
```
Invalid Name
 omas
```

C.



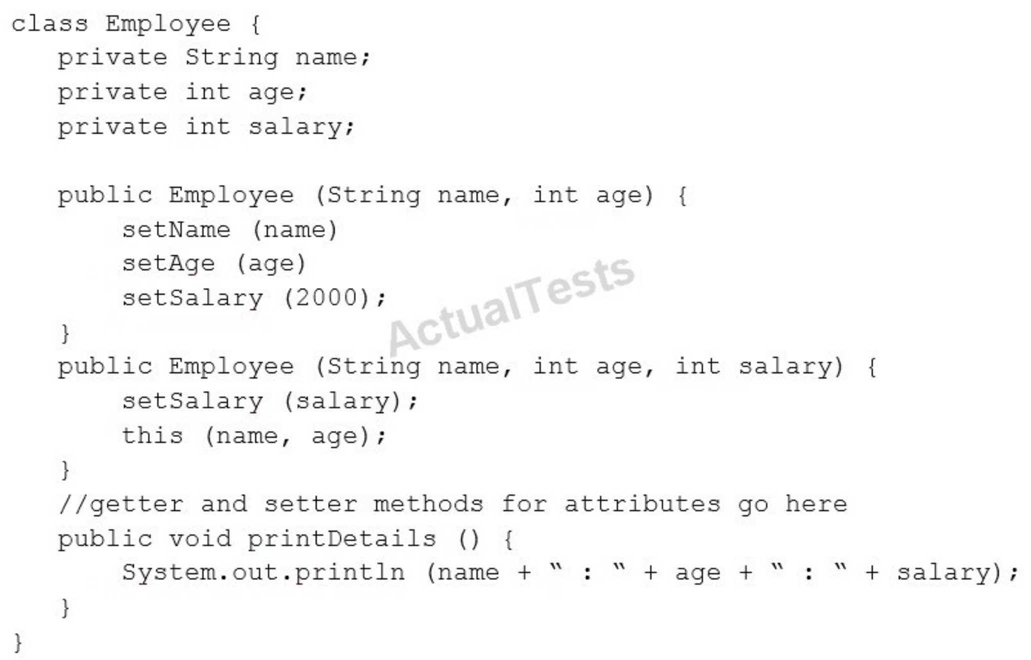
```
Invalid Name
 omas
 null
 null
```

D.



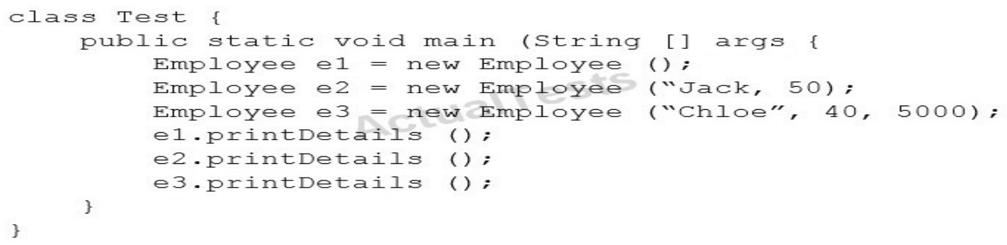
```
omas
 ter
 seph
```

QUESTION NO: 47
Given the code fragment:



```
class Employee {
   private String name;
   private int age;
   private int salary;

   public Employee (String name, int age) {
       setName (name)
       setAge (age)
       setSalary (2000);
   }
   public Employee (String name, int age, int salary) {
       setSalary (salary);
       this (name, age);
   }
   //getter and setter methods for attributes go here
   public void printDetails () {
       System.out.println (name + “ : “ + age + “ : “ + salary);
   }
}
```

Test.java

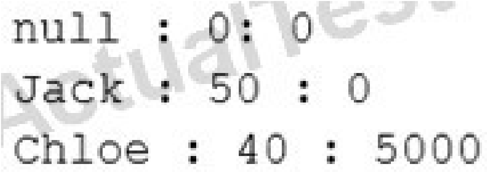


```
class Test {
     public static void main (String [] args {
          Employee e1 = new Employee ();
          Employee e2 = new Employee (“Jack, 50);
          Employee e3 = new Employee (“Chloe”, 40, 5000);
          e1.printDetails ();
          e2.printDetails ();
          e3.printDetails ();
     }
}
```

Which is the result?

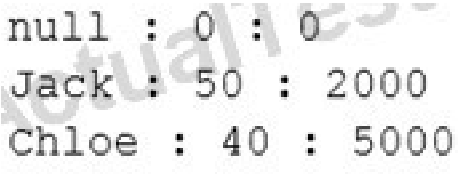
A. Compilation fails in the Employee class.

B.



```
null : 0: 0
Jack : 50 : 0
Chloe : 40 : 5000
```

C.



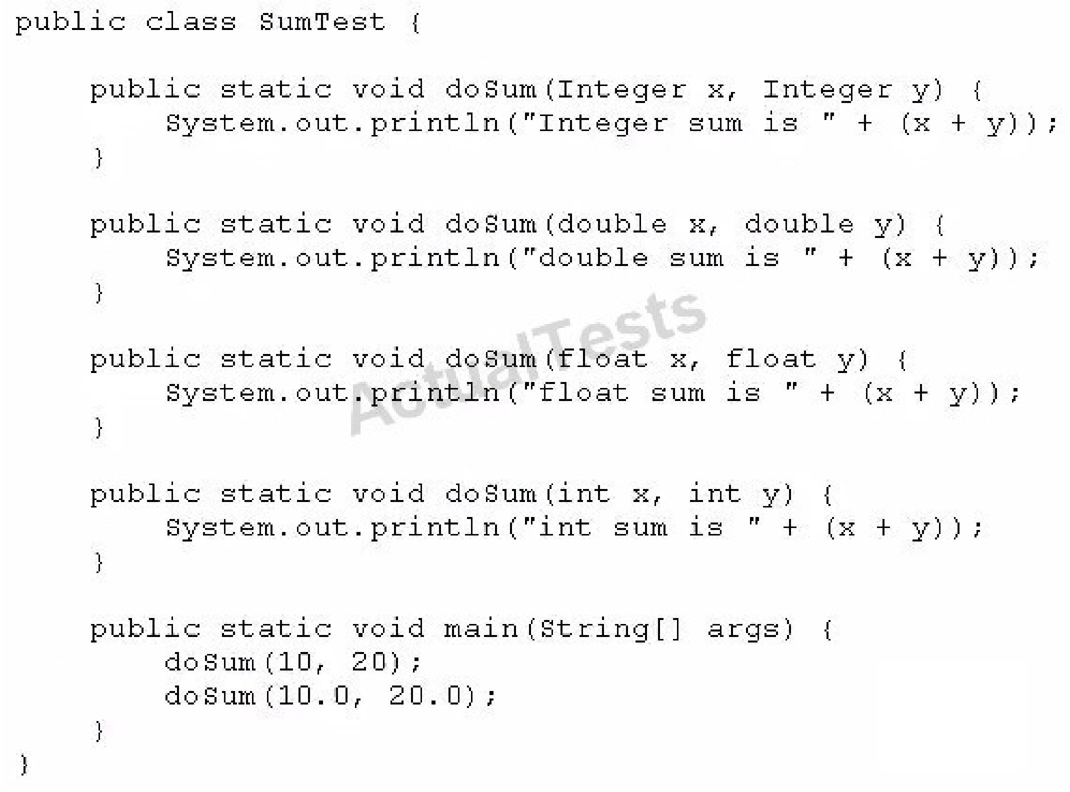
```
null : 0 : 0
Jack : 50 : 2000
Chloe : 40 : 5000
```

D. Compilation fails in the Test class.

E. Both the Employee class and the test class fail to compile.

QUESTION NO: 48

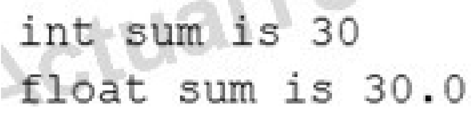
Given:



```
public class SumTest {

     public static void doSum(Integer x, Integer y) {
         System.out.println("Integer sum is " + (x + y));
     }

     public static void doSum(double x, double y) {
         System.out.println("double sum is " + (x + y));
     }

     public static void doSum(float x, float y) {
         System.out.println("float sum is " + (x + y));
     }

     public static void doSum(int x, int y) {
         System.out.println("int sum is " + (x + y));
     }

     public static void main(String[] args) {
         doSum(10, 20);
         doSum(10.0, 20.0);
     }
}
```

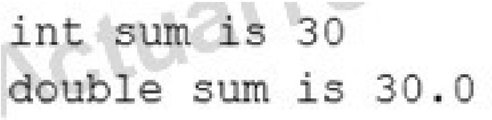
What is the result?

A.



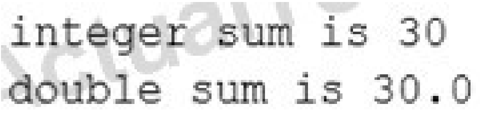
```
int sum is 30
float sum is 30.0
```

B.



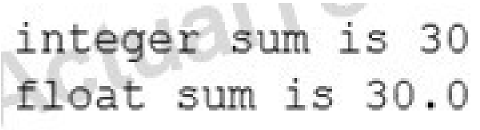
```
int sum is 30
double sum is 30.0
```

C.



```
integer sum is 30
double sum is 30.0
```

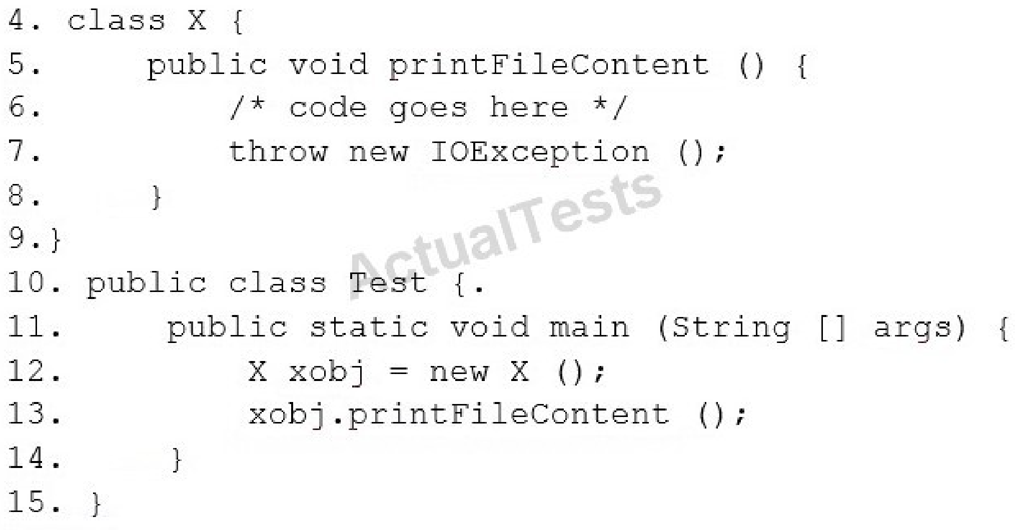
D.



```
integer sum is 30
float sum is 30.0
```

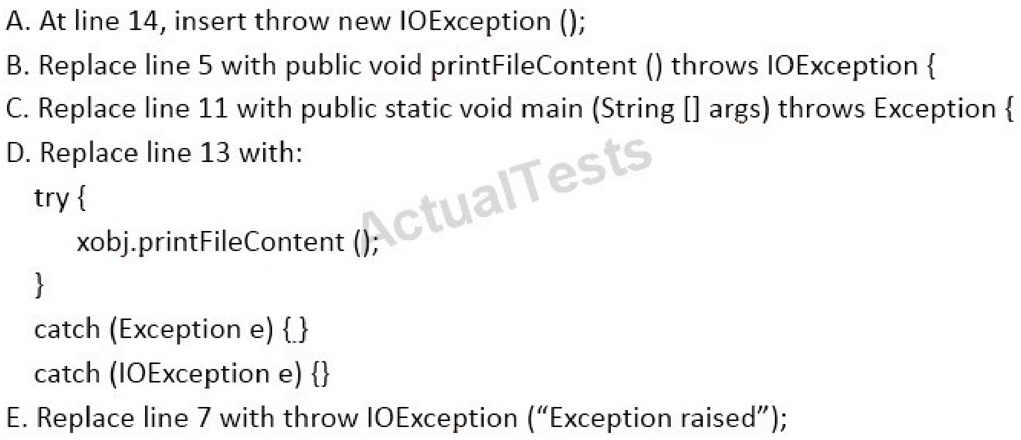
QUESTION NO: 49

Given the code fragment:



```
4. class X {
5.     public void printFileContent () {
6.         /* code goes here */
7.         throw new IOException ();
8.     }
9.}
10. public class Test {.
11.     public static void main (String [] args) {
12.         X xobj = new X ();
13.         xobj.printFileContent ();
14.     }
15. }
```

Which two modifications should you make so that the code compiles successfully?



A. At line 14, insert throw new IOException ();

B. Replace line 5 with public void printFileContent () throws IOException {

C. Replace line 11 with public static void main (String [] args) throws Exception {

D. Replace line 13 with:

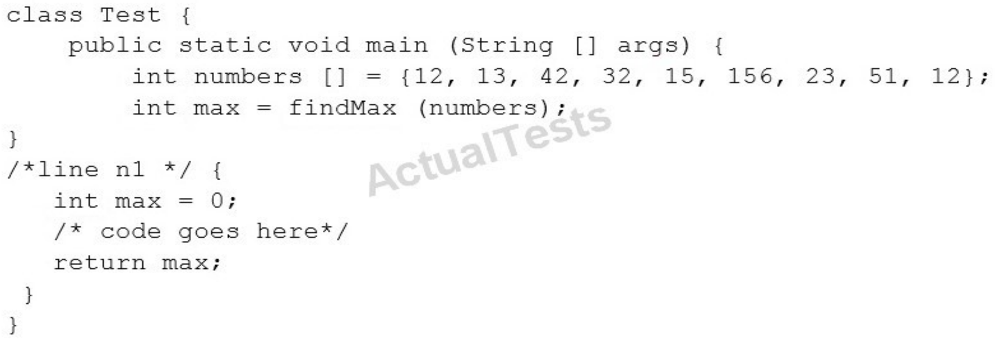
```
try {
    xobj.printFileContent ();
}
catch (Exception e) {.}
catch (IOException e) {}
```

E. Replace line 7 with throw IOException (“Exception raised”);

A. Option A
B. Option B
C. Option C
D. Option D
E. Option E

QUESTION NO: 50

You are asked to create a method that accepts an array of integers and returns the highest value from that array. Given the code fragment:



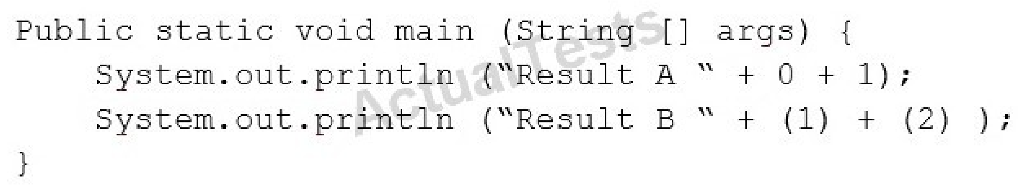
```
class Test {
    public static void main (String [] args) {
        int numbers [] = {12, 13, 42, 32, 15, 156, 23, 51, 12};
        int max = findMax (numbers);
}
/*line n1 */ {
   int max = 0;
   /* code goes here*/
   return max;
 }
}
```

Which method signature do you use at line n1?

A. public int findMax (int [] numbers)
B. static int[] findMax (int max)
C. static int findMax (int [] numbers)
D. final int findMax (int [])

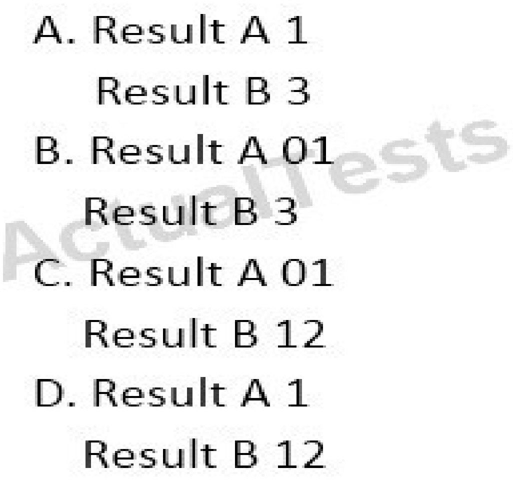
QUESTION NO: 51
Which three statements are true about the structure of a Java class?
A. A public class must have a main
method.
B. A class can have only one private constructor.
C. A method can have the same name as a field.
D. A class can have overloaded static methods.
E. The methods are mandatory componentsof a class.
F. The fields need not be initialized before use.

QUESTION NO: 52
Given the code fragment:



```
Public static void main (String [] args) {
    System.out.println (“Result A “ + 0 + 1);
    System.out.println (“Result B “ + (1) + (2) );
}
```

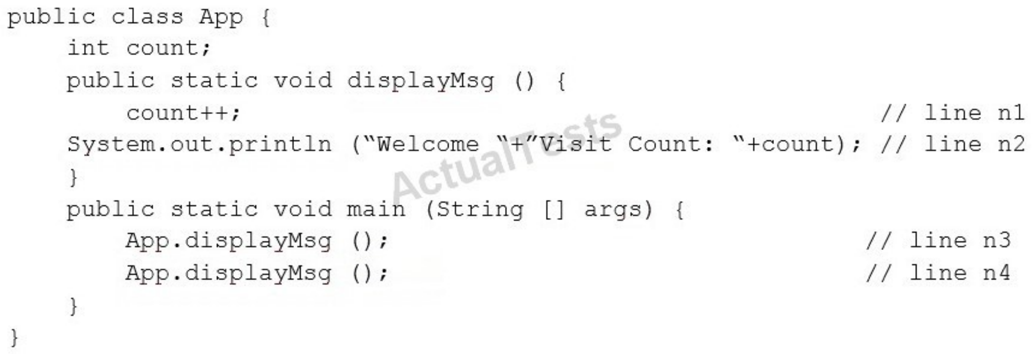
What is the result?



A. Result A 1
   Result B 3
B. Result A 01
   Result B 3
C. Result A 01
   Result B 12
D. Result A 1
   Result B 12

A. Option A
B. Option B
C. Option C
D. Option D

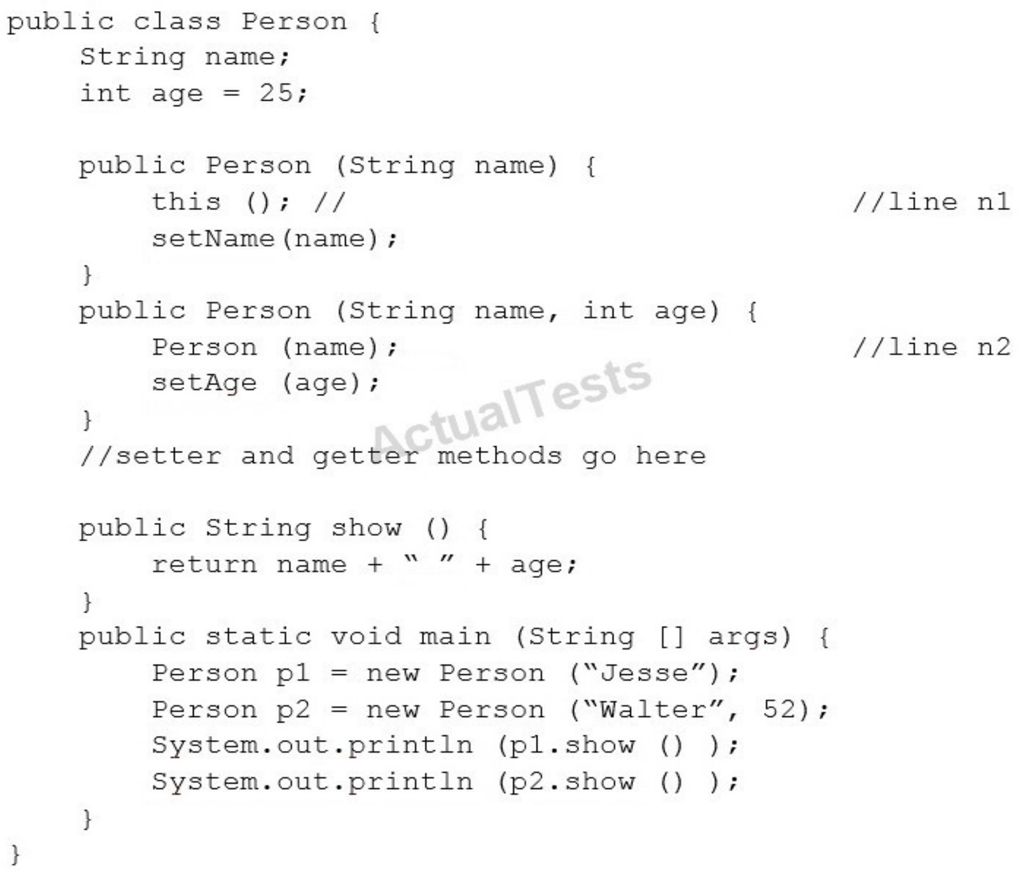
QUESTION NO: 53
Given:



```
public class App {
    int count;
    public static void displayMsg () {
        count++;                                        // line n1
    System.out.println (“Welcome “+”Visit Count: “+count); // line n2
    }
    public static void main (String [] args) {
        App.displayMsg ();                             // line n3
        App.displayMsg ();                             // line n4
    }
}
```

What is the result?
A. Compilation fails at line n3 and line n4.
B. Compilation fails at line n1 and line n2.
C. Welcome Visit Count:1
Welcome Visit Count: 2
D. Welcome Visit Count:1
Welcome Visit Count: 2

QUESTION NO: 54
Given the code fragment:



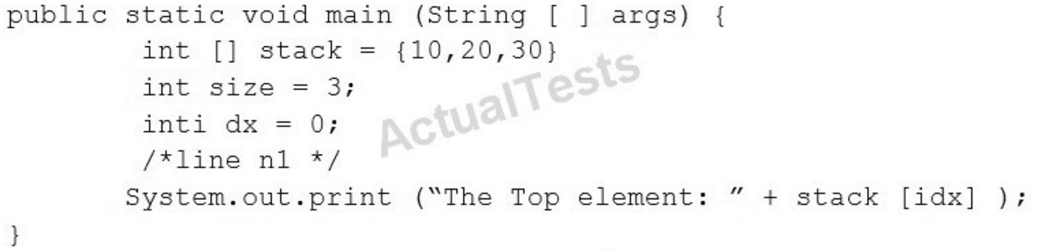
```
public class Person {
    String name;
    int age = 25;

    public Person (String name) {
        this (); //                              //line n1
        setName(name);
    }
    public Person (String name, int age) {
        Person (name);                           //line n2
        setAge (age);
    }
    //setter and getter methods go here

    public String show () {
        return name + “ ” + age;
    }
    public static void main (String [] args) {
        Person p1 = new Person (“Jesse”);
        Person p2 = new Person (“Walter”, 52);
        System.out.println (p1.show () );
        System.out.println (p2.show () );
    }
}
```

What is the result?
A. Compilation fails at both line n1 and line
n2.
B. Compilation fails only at line n2.
C. Compilation fails only at line n1.
D. Jesse 25
Walter 52

QUESTION NO: 55

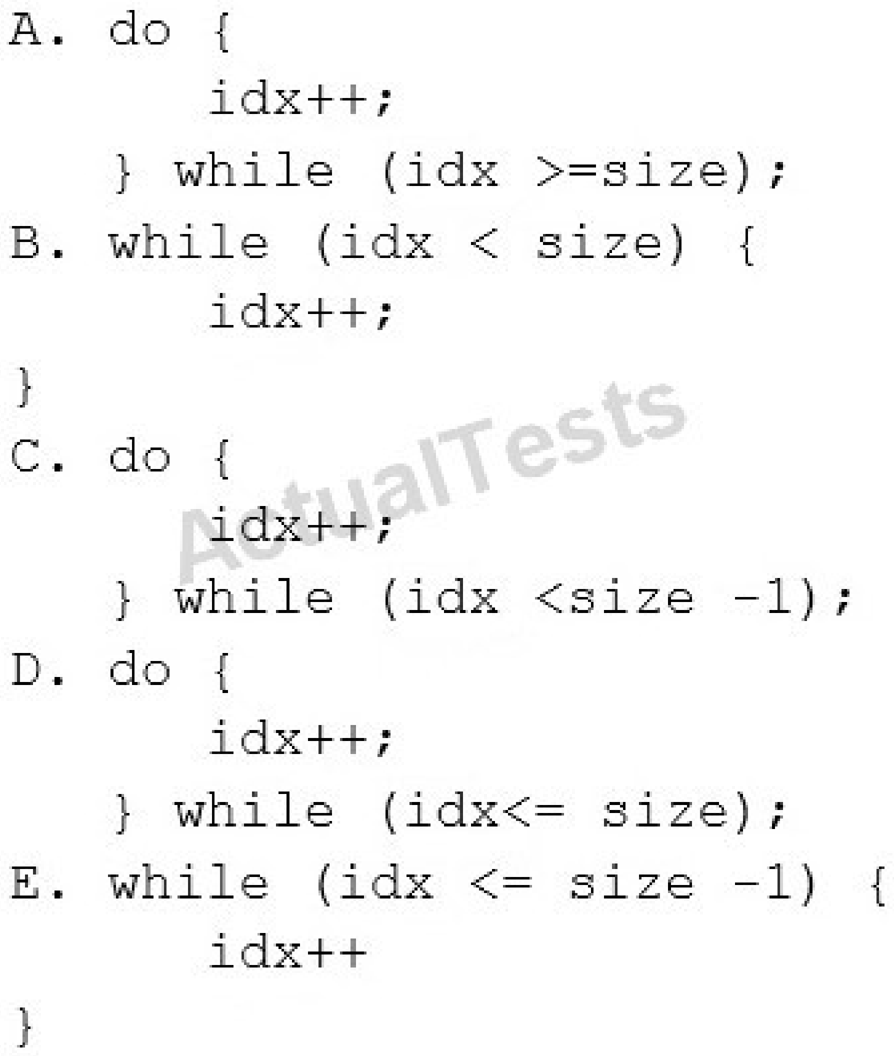
Which three statements are true about exception handling?
A. Only uncheckedexceptions can be rethrown.
B. All subclasses of the RuntimeException class are recoverable.
C. The parameter in a catch block is of Throwable type.
D. All subclasses of the RuntimeException class must be caught or declared to be thrown.
E. All subclassesof the Exception class except the RuntimeException class are checked exceptions.
F. All subclasses of the Error class are checked exceptions and are recoverable.

QUESTION NO: 56
Given the code fragment:



```
public static void main (String [ ] args) {
        int [] stack = {10,20,30}
        int size = 3;
        inti dx = 0;
        /*line n1 */
       System.out.print (“The Top element: ” + stack [idx] );
}
```

Which code fragment, inserted at line n1, pints The Top element: 30?



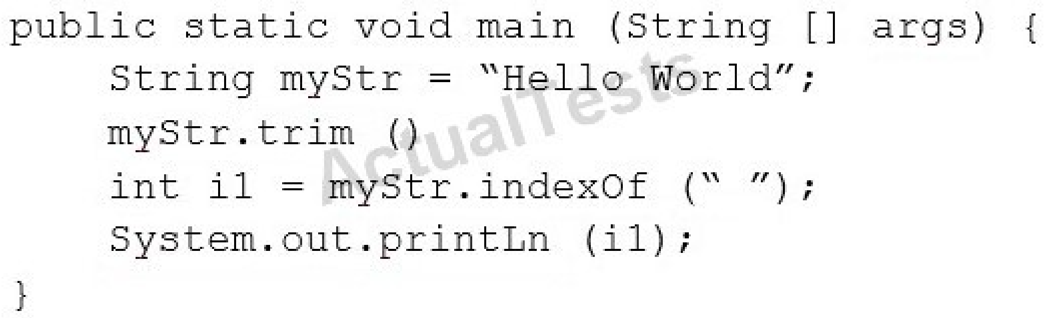
```
A. do {
       idx++;
   } while (idx >=size);
B. while (idx < size) {
       idx++;
}
C. do {
       idx++;
   } while (idx <size -1);
D. do {
       idx++;
   } while (idx<= size);
E. while (idx <= size -1) {
       idx++
}
```

A. Option A
B. Option B

C. Option C
D. Option D
E. Option E

QUESTION NO: 57

Given the code fragment:



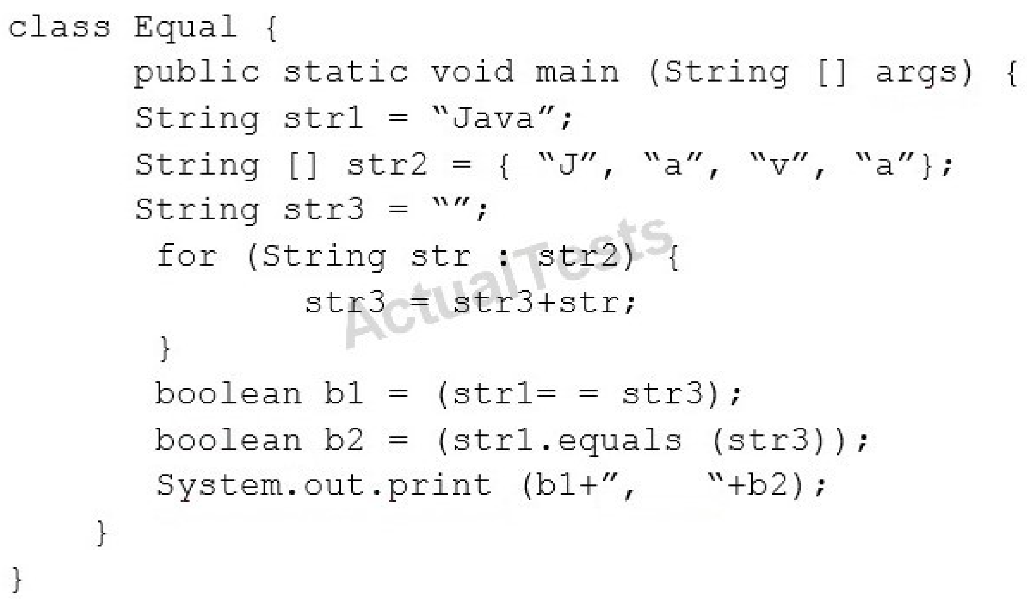
```
public static void main (String [] args) {
     String myStr = “Hello World”;
     myStr.trim ()
     int i1 = myStr.indexOf (“ ”);
     System.out.printLn (i1);
}
```

What is the result?

A. An exception is thrown at runtime.
B. -1
C. 5
D. 0

QUESTIONNO: 58

Given:



```
class Equal {
      public static void main (String [] args) {
      String str1 = “Java”;
      String [] str2 = { “J”, “a”, “v”, “a”};
      String str3 = “”;
       for (String str : str2) {
              str3 = str3+str;
       }
       boolean b1 = (str1= = str3);
       boolean b2 = (str1.equals (str3));
       System.out.print (b1+”,   “+b2);
    }
}
```

What is the result?

A. false, false
B. false, true
C. true, false
D. true, true

QUESTION NO: 59

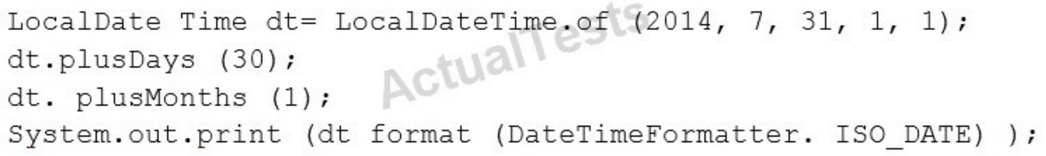
Which two statements are true?

A. Error class is unextendable.
B. Error class is extendable.
C. Error is a RuntimeException.
D. Error is an Exception.

E. Error is a Throwable.

QUESTION NO: 60

Given the code fragment:



```
LocalDate Time dt= LocalDateTime.of (2014, 7, 31, 1, 1);
dt.plusDays (30);
dt. plusMonths (1);
System.out.print (dt format (DateTimeFormatter. ISO_DATE) );
```

What is the result?

A. An exception is thrown at runtime.

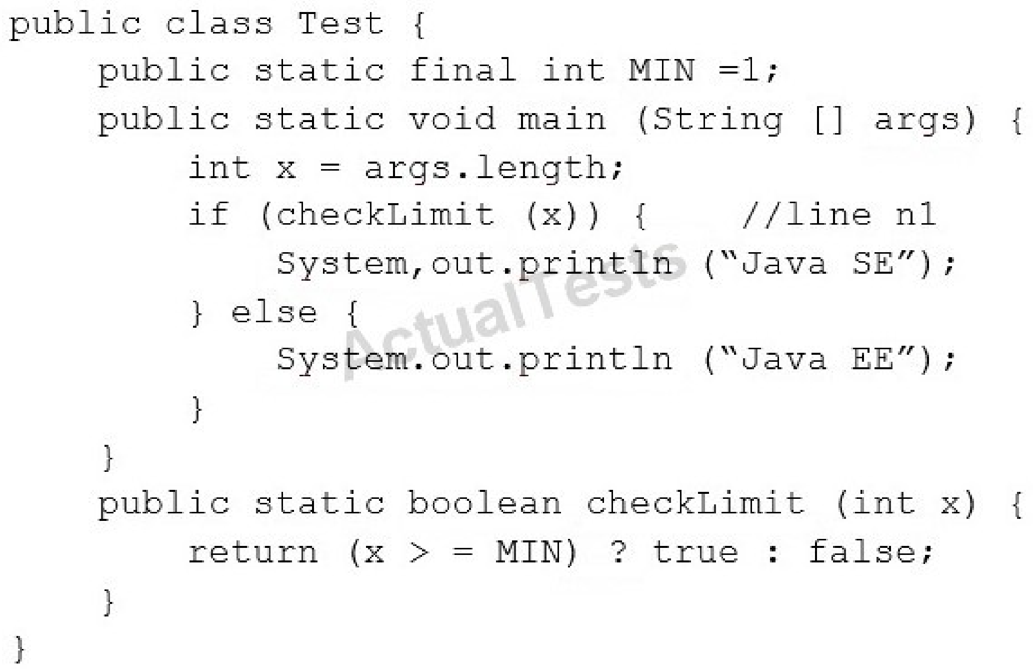
B. 07-31-2014

C. 2014-07-31

D. 2014-09-30

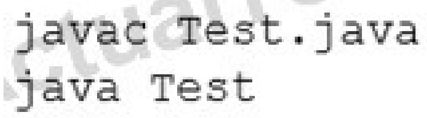
QUESTION NO: 61

Given:



```
public class Test {
    public static final int MIN =1;
    public static void main (String [] args) {
        int x = args.length;
        if (checkLimit (x)) {    //line n1
            System,out.println (“Java SE”);
        } else {
            System.out.println (“Java EE”);
        }
    }
    public static boolean checkLimit (int x) {
        return (x > = MIN) ? true : false;
    }
}
```

And given the commands:



```
javac Test.java
java Test
```

What is the result?

A. Java SE

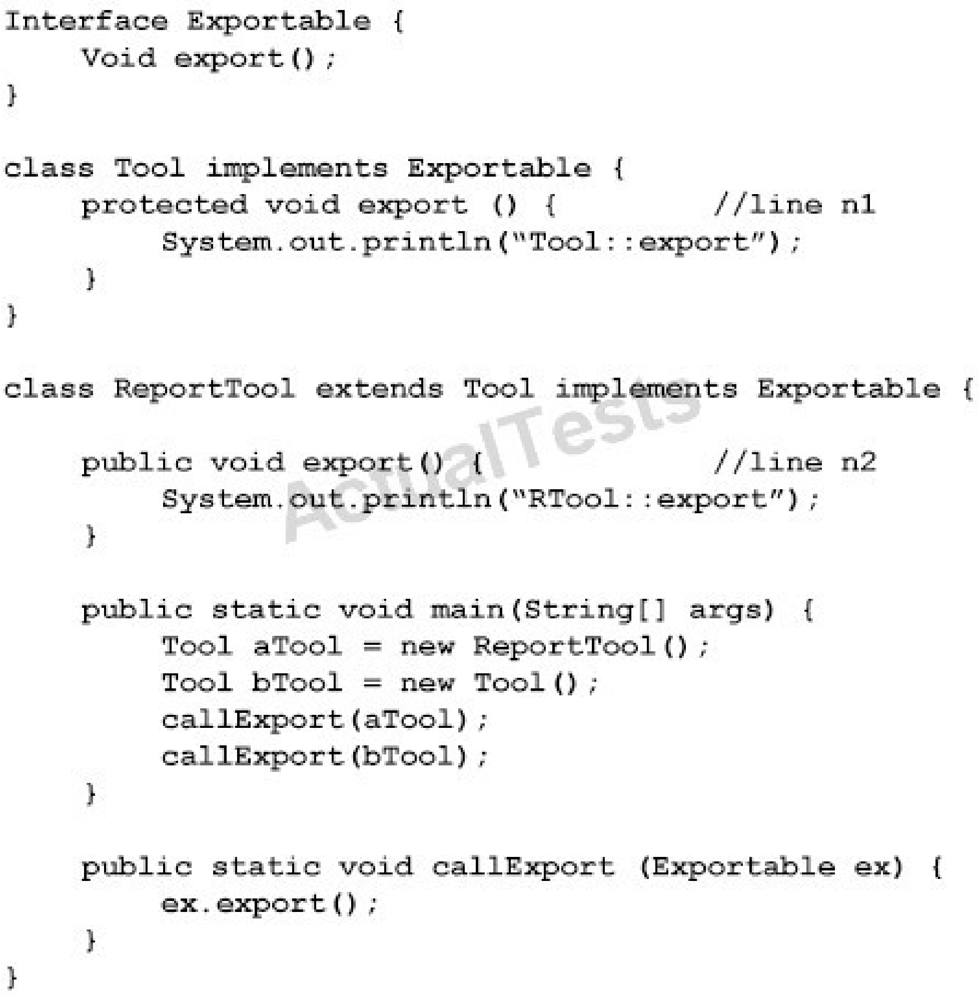
B. Java EE

C. Compilation fails at line n1.

D. ANullPointerException is thrown at runtime.

QUESTION NO: 62

Given the code fragments:



```
Interface Exportable {
     Void export();
}

class Tool implements Exportable {
     protected void export () {          //line n1
          System.out.println(“Tool::export”);
     }
}

class ReportTool extends Tool implements Exportable {

     public void export() {              //line n2
          System.out.println(“RTool::export”);
     }

     public static void main(String[] args) {
          Tool aTool = new ReportTool();
          Tool bTool = new Tool();
          callExport(aTool);
          callExport(bTool);
     }

     public static void callExport (Exportable ex) {
          ex.export();
     }
}
```

What is the result?

A. Compilation fails only at line n2.

B. RTool::export
Tool::export

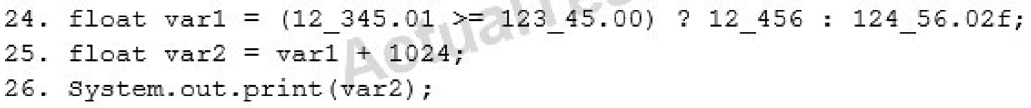
C. Tool::export
Tool:export

D. Compilation fails only at line n1.

E. Compilationfails at both line n1 and line n2.

QUESTION NO: 63

Given the code fragment:



```
float var1 = (12_345.01 >= 123_45.00) ? 12_456 : 124_56.02f;
float var2 = var1 + 1024;
System.out.print(var2);
```

What is the result?

A. An exception is thrown at runtime.

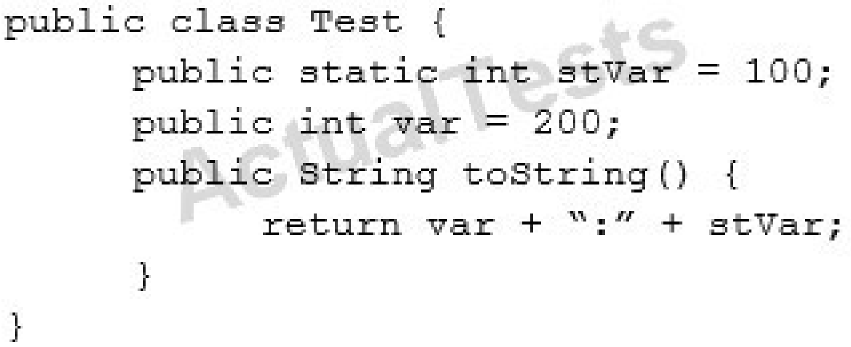
B. Compilation fails.

C. 13480.0

D. 13480.02

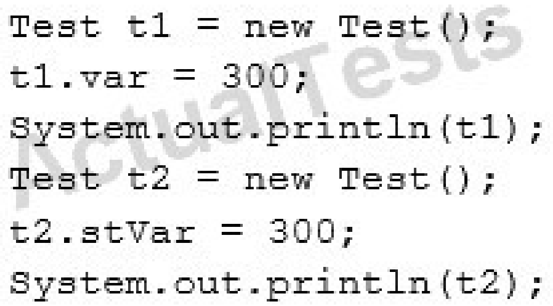
QUESTION NO: 64

Given:



```
public class Test {
      public static int stVar = 100;
      public int var = 200;
      public String toString() {
            return var + ":" + stVar;
      }
}
```

And given the code fragment:



```
Test t1 = new Test();
t1.var = 300;
System.out.println(t1);
Test t2 = new Test();
t2.stVar = 300;
System.out.println(t2);
```

What is the result?

A. 300:300
200:300

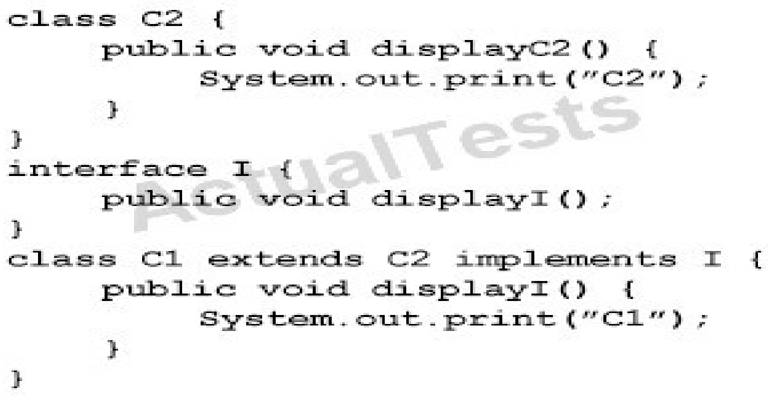
B. 300:100
200:300

C. 300:0
0:300

D. 200:300
200:300

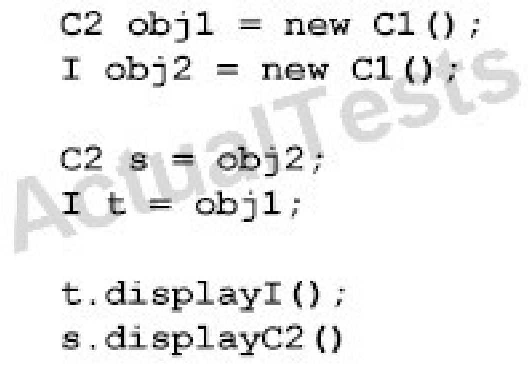
QUESTION NO: 65

Given:



```
class C2 {
     public void displayC2() {
          System.out.print("C2");
     }
}
interface I {
     public void displayI();
}
class C1 extends C2 implements I {
     public void displayI() {
          System.out.print("C1");
     }
}
```

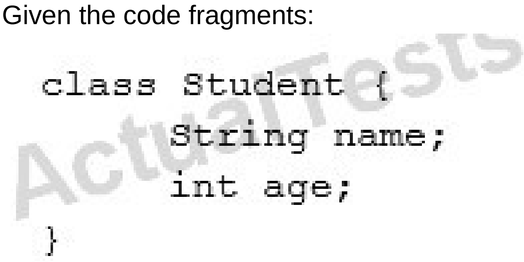
And given the code fragment:



```
C2 obj1 = new C1();
I obj2 = new C1();

C2 s = obj2;
I t = obj1;

t.displayI();
s.displayC2()
```

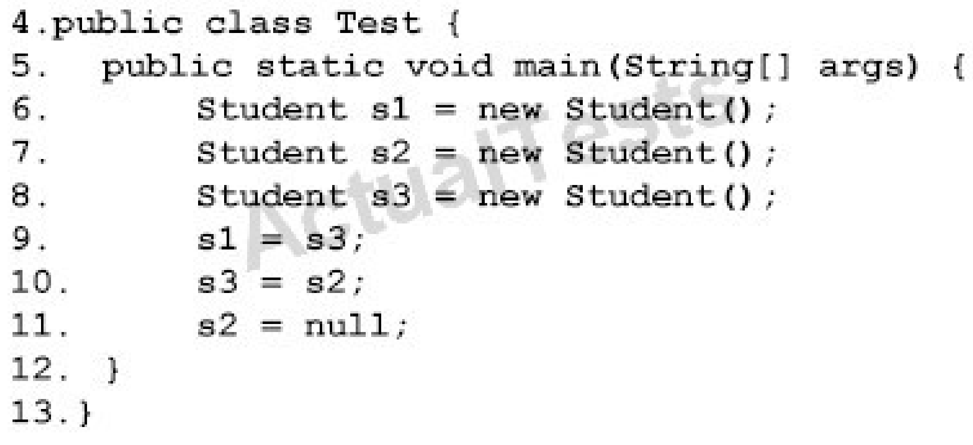
What is the result?
A. C2C2
B. C1C2
C. C1C1
D. Compilation fails

QUESTION NO: 66
Given the code fragments:



```
class Student {
      String name;
      int age;
}
```

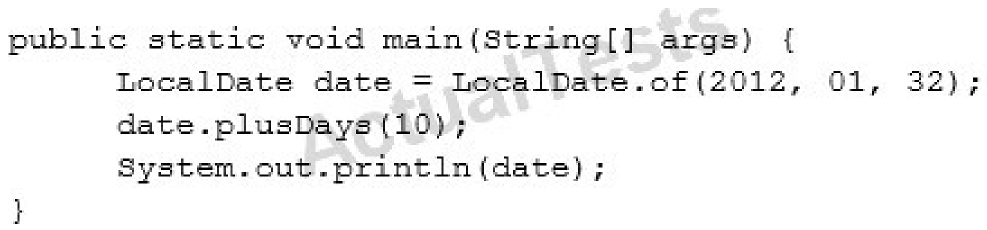
And,



```
4.public class Test {
5.  public static void main(String[] args) {
6.        Student s1 = new Student();
7.        Student s2 = new Student();
8.        Student s3 = new Student();
9.        s1 = s3;
10.       s3 = s2;
11.       s2 = null;
12. }
13.}
```

Which statement is true?
A. After line 11, three objects are eligible for garbage collection.
B. After line 11, two objects are eligible for garbage collection.
C. After line 11, one object is eligible for garbage collection.
D. After line 11, none of the objects are eligible for garbage collection.

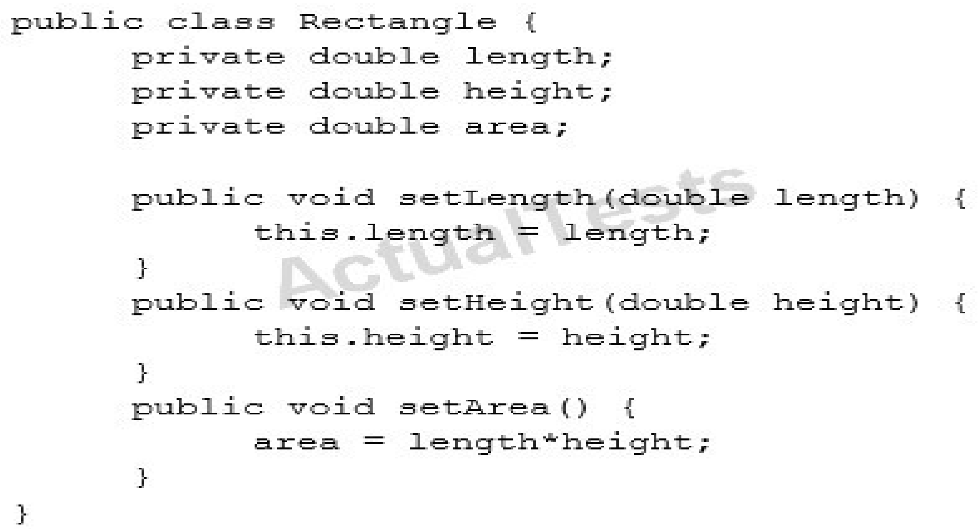
QUESTION NO: 67
Given the code fragment:



```
public static void main(String[] args) {
      LocalDate date = LocalDate.of(2012, 01, 32);
      date.plusDays(10);
      System.out.println(date);
}
```

What is the result?
A. 2012-02-10
B. 2012-02-11
C. Compilation fails
D. A DateTimeException is thrown at runtime.

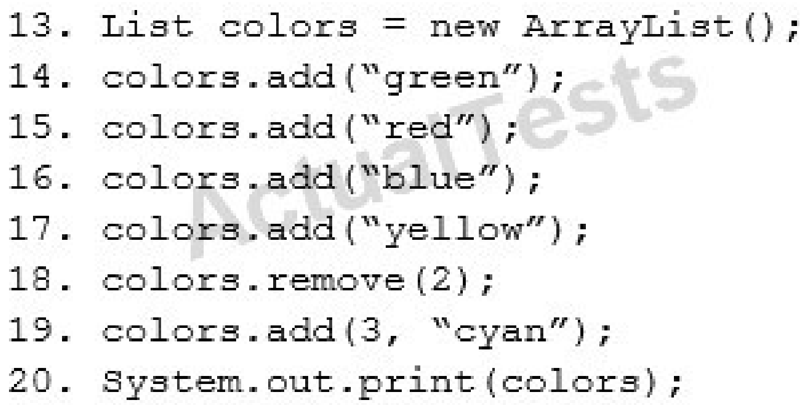
QUESTION NO: 68
Given the following class:



```
public class Rectangle {
      private double length;
      private double height;
      private double area;

      public void setLength(double length) {
            this.length = length;
      }
      public void setHeight(double height) {
            this.height = height;
      }
      public void setArea() {
            area = length*height;
      }
}
```

Which two changes would encapsulate this class and ensure that the area field is always equal to length * height whenever the Rectangle class is used?
A. Call the setArea method at the end of the setHeight method.
B. Call the setArea method at the beginning of the setHeight method.
C. Call the setArea method at the end of the setLength method.
D. Call the setArea method at the beginning of the setLength method.
E. Change the setArea method to private.
F. Change the area field to public.

QUESTION NO: 69
Given the code fragment:



```
List colors = new ArrayList();
colors.add(“green”);
colors.add(“red”);
colors.add(“blue”);
colors.add(“yellow”);
colors.remove(2);
colors.add(3, “cyan”);
System.out.print(colors);
```

What is the result?

A. (green, red, yellow, cyan)

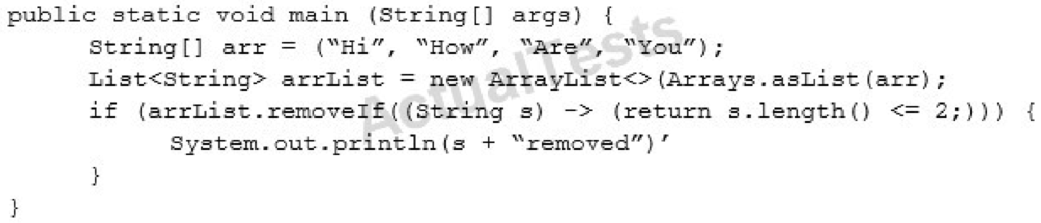
B. (green, blue, yellow, cyan)

C. (green, red, cyan, yellow)

D. AnIndexOutOfBoundsExceptionis thrown at runtime.

QUESTION NO: 70

Given the code fragment:



```
public static void main (String[] args) {
      String[] arr = (“Hi”, “How”, “Are”, “You”);
      List<String> arrList = new ArrayList<>(Arrays.asList(arr);
      if (arrList.removeIf((String s) -> (return s.length() <= 2;))) {
            System.out.println(s + “removed”)’
      }
}
```

What is the result?

A. Compilation fails.

B. Hi removed

C. An UnsupportedOperationException is thrown at runtime.

D. The program compiles, but it prints nothing.