1z0-808.89q

Number: 1z0-808
Passing Score: 800
Time Limit: 120 min

1z0-808

Java SE 8 Programmer I

Exam A

QUESTION 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. `Vehicle` is an interface that is implemented by the `Motorcycle` class.
B. `Vehicle` and `Motorcycle` both implement the `Transportation` interface
C. `Vehicle` is a superclass of `Motorcycle`.
D. `Motorcycle` is a superclass of `Vehicle`.
E. `Vehicle` and `Motorcycle` both extend the Transportation superclass.
F. `Motorcycle` is an interface that implements the `Vehicle` class.

Correct Answer: CE
Section: (none)
Explanation

Explanation/Reference:

QUESTION 2

Given the code fragment:

```
public static void main(String[] args) {
    String date = LocalDate
                  .parse("2014-05-04")
                  .format(DateTimeFormatter.ISO_DATE_TIME);
    System.out.println(date);
}
```

What is the result?

A. `May 04, 2014T00:00:00.000`

B. `2014-05-04T00:00: 00. 000` C. `5/4/14T00:00:00.000`

D. An exception is thrown at runtime.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 3
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.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 4
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

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
Explanation:
Using the private modifier is the main way that an object encapsulates itself and hide data from the outside world.
Reference: http://www.tutorialspoint.com/java/java_access_modifiers.htm

QUESTION 5
Given the code fragment:

```
abstract class Planet {
    protected void revolve() {            //line n1
    }

    abstract void rotate();               //line n2
}

class Earth extends Planet {
    void revolve() {                      //line n3
    }

    protected void rotate() {             //line n4
    }
}
```

Which two modifications, made independently, enable the code to compile? (Choose two.)

A. Make the method at line n1 public.
B. Make the method at line n2 public.
C. Make the method at line n3 public.
D. Make the method at line n3 protected.
E. Make the method at line n4 public.

Correct Answer: CD
Section: (none)
Explanation

Explanation/Reference:

QUESTION 6
Given:

```
class Vehicle {
    String type = "4W";
    int maxSpeed = 100;

    Vehicle(String type, int maxSpeed) {
        this.type = type;
        this.maxSpeed = maxSpeed;
    }
}

class Car extends Vehicle {
    String trans;

    Car(String trans) {          //line n1
        this.trans = trans;
    }

    Car(String type, int maxSpeed, String trans) {
        super(type, maxSpeed);
        this(trans);             //line n2
    }
}
```

And given the code fragment:

```
 7. Car c1 = new Car("Auto");
 8. Car c2 = new Car("4W", 150, "Manual");
 9. System.out.println(c1.type + " " + c1.maxSpeed + " " + c1.trans);
10. System.out.println(c2.type + " " + c2.maxSpeed + " " + c2.trans);
```

What is the result?

A. 4W 100 Auto
   4W 150 Manual
B. Null 0 Auto

4W 150 Manual

C. Compilation fails only at line n1
D. Compilation fails only at line n2
E. Compilation fails at both line n1 and line n2

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 7
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

Correct Answer: C
Section: (none)
Explanation
Explanation/Reference:

QUESTION 8

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

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 9
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?

```
int e = 0; e <= 4; e++
int e = 0; e < 5; e += 2
int e = 1; e <= 5; e += 1
int e = 1; e < 5; e+=2
```

A.

B.

C.

D.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

QUESTION 10
Which statement best describes encapsulation?

A. Encapsulation ensures that classes can be designed 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.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 11
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 DE. Option E

Correct Answer: E
Section: (none)
Explanation

Explanation/Reference:

QUESTION 12
Given the code fragment:

```
public class Test{

    void readCard(int cardNo) throws Exception {
        System.out.println("Reading Card");
    }

    void checkCard(int cardNo) throws RuntimeException { // line n1
        System.out.println("Checking Card");
    }

    public static void main(String[] args) {
        Test ex = new Test();
        int cardNo = 12344;
        ex.checkCard(cardNo);                //line n2
        ex.readCard(cardNo);                 //line n3
    }
}
```

What is the result?

A.
```
Reading Card
Checking Card
```

B. Compilation fails only at `line n1`.
C. Compilation fails only at `line n2`.

D. Compilation fails only at `line n3`.
E. Compilation fails at both line n2 and `line n3`.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 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 = 1`; Replace line 7 with case 1:
C. At line 9, remove the break statement.
D. Remove the default section.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 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

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 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

Correct Answer: E
Section: (none)
Explanation

Explanation/Reference:

QUESTION 16
Given:

```
class A {
    public A(){
        System.out.print("A ");
    }
}

class B extends A{
    public B(){                         //line n1
        System.out.print("B ");
    }
}

class C extends B{

    public C(){                         //line n2
        System.out.print("C ");
    }
    public static void main(String[] args) {
        C c = new C();
    }
}
```

What is the result?

A. C B A B.
C
C. A B C
D. Compilation fails at line n1 and line n2

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
QUESTION 17

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. 3 4 3 6
C. 5 4 5 6
D. 3 6 4 6

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 18
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  = new int[2];
```

B.

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

C.

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

D.

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

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 19
Given the code fragment:

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

What is the result?

A. A B C Work done
B. A B C D Work doneC. A Work done

D. Compilation fails

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 20
Which three are advantages of the Java exception mechanism? (Choose three.)

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

Correct Answer: ACD
Section: (none)
Explanation

Explanation/Reference:
Reference: http://javajee.com/introduction-to-exceptions-in-java

QUESTION 21
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 `DateParseException` is thrown at runtime.

Correct Answer: A
Section: (none)
Explanation
Explanation/Reference:

QUESTION 22
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";

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 23
Given:

```
public class Test {
      public static void main(String[] args) {
            Test ts = new Test();
            System.out.print(isAvailable + " ");
            isAvailable= ts.doStuff();
            System.out.println(isAvailable);
      }
      public static boolean doStuff() {
            return !isAvailable;
      }
      static boolean isAvailable = false;
}
```

What is the result?

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

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

QUESTION 24
Given the code fragment:

```
public static void main(String[] args) {
    double discount = 0;
    int qty = Integer.parseInt(args[0]);
    //line n1;
}
```

And given the requirements:
If the value of the qty variable is greater than or equal to 90, discount = 0.5
If the value of the qty variable is between 80 and 90, discount = 0.2

Which two code fragments can be independently placed at line n1 to meet the requirements? (Choose two.)

☐ A)
```
if (qty >= 90) { discount = 0.5; }
if (qty > 80 && qty < 90) { discount = 0.2; }
```

☐ B)
```
discount = (qty >= 90) ? 0.5 : 0;
discount = (qty > 80) ? 0.2 : 0;
```

☐ C)
```
discount = (qty >= 90) ? 0.5 : (qty > 80)? 0.2 : 0;
```

☐ D)
```
if (qty > 80 && qty < 90) {
    discount = 0.2;
} else {
    discount = 0;
}
if (qty >= 90) {
    discount = 0.5;
} else {
    discount = 0;
}
```

☐ E)
```
discount = (qty > 80) ? 0.2 : (qty >= 90) ? 0.5 : 0;
```

A. Option A
B. Option B

C. Option C
D. Option DE. Option E

Correct Answer: AC
Section: (none)
Explanation

Explanation/Reference:

QUESTION 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
Correct Answer: B

Section: (none)
Explanation

Explanation/Reference:

QUESTION 26
Which three statements describe the object-oriented features of the Java language? (Choose three.)

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.

Correct Answer: BCF
Section: (none)
Explanation

Explanation/Reference:
Reference: http://www.javaworld.com/article/2075459/java-platform/java-101--object-oriented-language-basics--part-5--object-and-its-methods.html (see the sub title, Object is root of all classes not all other objects)

QUESTION 27
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? (Choose two.)

☐ 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

Correct Answer: BC

Section: (none)
Explanation

Explanation/Reference:

QUESTION 28
Given:

Acc.java:

```
package p1;
public class Acc {
    int p;
    private int q;
    protected int r;
    public int s;
}
```

Test.java:

```
package p2;
import p1.Acc;
public class Test extends Acc {
    public static void main(String[] args) {
        Acc obj = new Test();
    }
}
```

Which statement is true?

A. Both p and s are accessible by obj.
B. Only s is accessible by obj.
C. Both r and s are accessible by obj.
D. p, r, and s are accessible by obj.

Correct Answer: B

Section: (none)
Explanation

Explanation/Reference:

QUESTION 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 ClassCastException is thrown at runtime.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 30
Given:

```
System.out.println("5 + 2 = " + 3 + 4);
System.out.println("5 + 2 = " + (3 + 4));
```

What is the result?

A)
```
5 + 2 = 34
5 + 2 = 34
```

B)
```
5 + 2 + 3 + 4
5 + 2 = 7
```

C)
```
7 = 7
7 + 7
```

D)
```
5 + 2 = 34
5 + 2 = 7
```

A. Option A

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

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 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);
```

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

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

B.

C.

D.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 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.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 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

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 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

Correct Answer: B
Section: (none)
Explanation
Explanation/Reference:

QUESTION 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
```

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

```
Integer sum is 30
double sum is 30.0
```

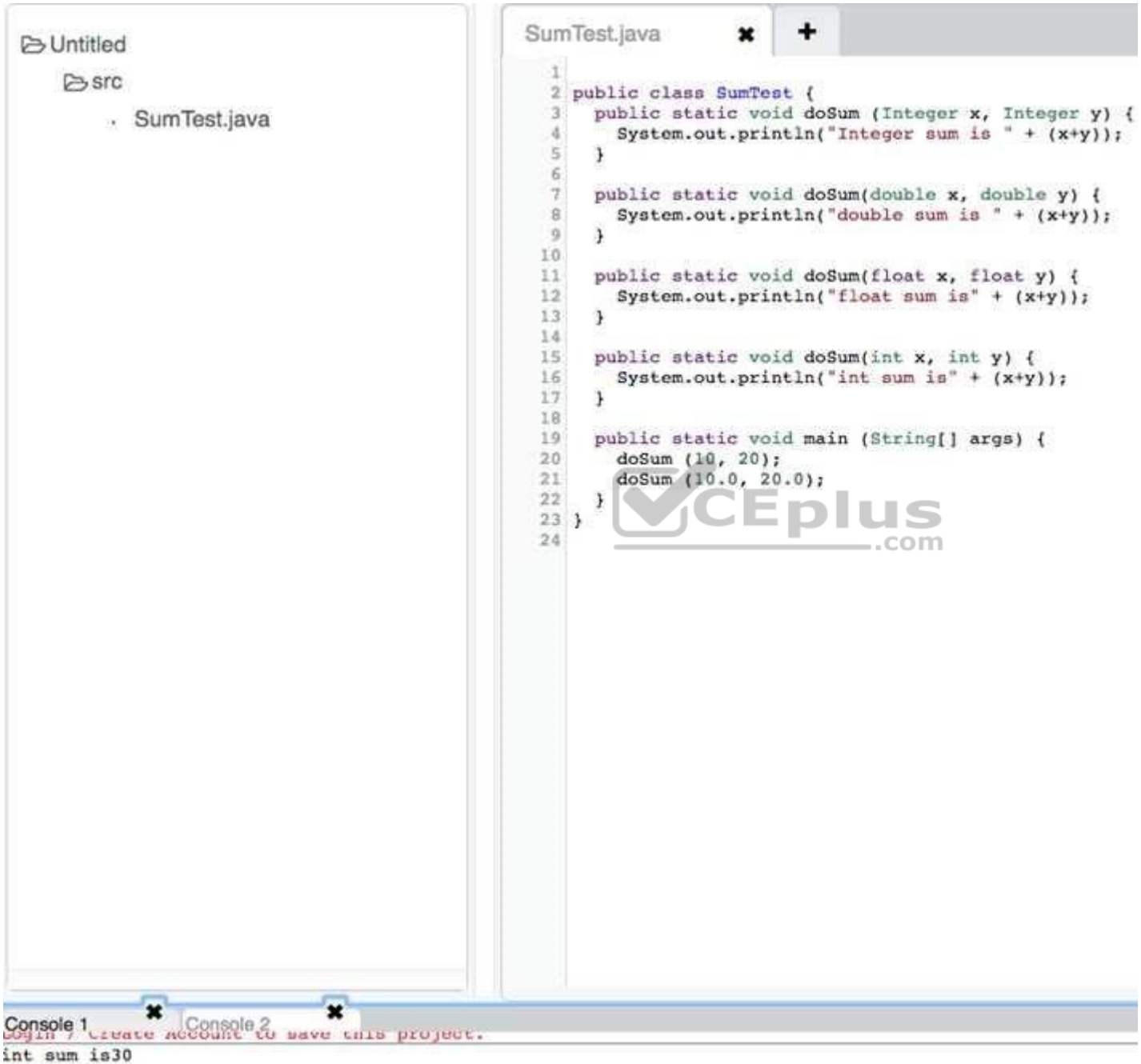
```
Integer sum is 30
float sum is 30.0
```

B. C.

D.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation:



QUESTION 36

Given the definitions of the MyString class and the Test class:

MyString.java:

```
package p1;
class MyString {
    String msg;
    MyString(String msg) {
        this.msg = msg;
    }
}
```

Test.java:

```
package p1;
public class Test {
    public static void main(String[] args) {
        System.out.println("Hello " + new StringBuilder("Java SE 8"));
        System.out.println("Hello " + new MyString("Java SE 8"));
    }
}
```


What is the result?

```
Hello Java SE 8
Hello Java SE 8
```

```
Hello java.lang.StringBuilder@<<hashcode1>>
Hello p1.MyString@<<hashcode2>>
```

```
Hello Java SE 8
Hello p1.MyString@<<hashcode>>
```

A.

B.

C.

D. Compilation fails at the `Test` Class

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 37

Given the code fragment:

```
3. public static void main(String[] args) {
4.     int iVar = 100;
5.     float fVar = 100.100f;
6.     double dVar = 123;
7.     iVar = fVar;
8.     fVar = iVar;
9.     dVar = fVar;
10.    fVar = dVar;
11.    dVar = iVar;
12.    iVar = dVar;
13. }
```

A. Line 4
B. Line 4
C. Line 4
D. Line 4
E. Line 4
F. Line 84

Correct Answer: ADF
Section: (none) ExplanationExplanation/Reference:QUESTION 84

Which three lines fail to compile?

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
```

```
num[0][0]=10
num[1][0]=10
num[2][0]=10
```

```
num[0][0]=10
num[0][1]=0
num[0][2]=0
```

B.

```
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
```

C.

D.

Correct Answer: A
Section: (none)
Explanation
Explanation/Reference:

QUESTION 39
You are asked to develop a program for a shopping application, and you are given the following information:
- The application must 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 */ }
}
```

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 40
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

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 41
Given the following class declarations: ▪ public abstract class Animal ▪ public interface Hunter
▪ public class Cat extends Animal implements 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 DE. Option E

Correct Answer: E
Section: (none)
Explanation

Explanation/Reference:

QUESTION 42
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.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:
Reference: http://www.math.uni-hamburg.de/doc/java/tutorial/getStarted/intro/definition.html
Explanation:
Java bytecodes help make "write once, run anywhere" possible. You can compile your program into bytecodes on any platform that has a Java compiler. The bytecodes can then be run on any implementation of the Java VM. That means that as long as a computer has a Java VM, the same program written in the Java programming language can run on Windows 2000, a Solaris workstation, or on an iMac.

QUESTION 43
Given:

```
public class Triangle {
    static double area;
    int b = 2, h = 3;
    public static void main(String[] args) {
        double p, b, h;        //line n1
        if (area == 0) {
            b = 3;
            h = 4;
            p = 0.5;
        }
        area = p * b * h;      //line n2
        System.out.println("Area is " + area);
    }
}
```

What is the result?

A. Area is 6.0
B. Area is 3.0
C. Compilation fails at line n1

D. Compilation fails at line n2.

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 44
Given the code fragment:

```
public class Test {
    public static void main(String[] args) {
        //line n1
        switch (x) {
            case 1:
                System.out.println("One");
                break;
            case 2:
                System.out.println("Two");
                break;
        }
    }
}
```

Which three code fragments can be independently inserted at line n1 to enable the code to print one? (Choose three.)

A. Byte x = 1;
B. short x = 1;
C. String x = "1";
D. Long x = 1;
E. Double x = 1;
F. Integer x = new Integer ("1");

Correct Answer: ABF
Section: (none)
Explanation

Explanation/Reference:

QUESTION 45
Given:

```
public class App {

    public static void main(String[] args) {
        Boolean[] bool = new Boolean[2];

        bool[0] = new Boolean(Boolean.parseBoolean("true"));
        bool[1] = new Boolean(null);

        System.out.println(bool[0] + " " + bool[1]);
    }
}
```


What is the result?

A. True false
B. True null
C. Compilation fails
D. A NullPointerException is thrown at runtime

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 46

Given the code fragment:

```
int nums1[] = new int[3];
int nums2[] = {1, 2, 3, 4, 5};
nums1 = nums2;
for (int x : nums1){
    System.out.print(x + ":");
}
```

 What is the result?

A. 1:2:3:4:5:
B. 1:2:3:
C. Compilation fails.
D. An ArrayoutofBoundsException is thrown at runtime.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 47
Given:

```
public class Product {
    int id;
    String name;
    public Product(int id, String name) {
       this.id = id;
       this.name = name;
    }
}
```

And given the code fragment:

```
4. Product p1 = new Product(101, "Pen");
5. Product p2 = new Product(101, "Pen");
6. Product p3 = p1;
7. boolean ans1 = p1 == p2;
8. boolean ans2 = p1.name.equals(p2.name);
9. System.out.print(ans1 + ":" + ans2);
```

What is the result?

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

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 48
Given the following classes:

```
public class Employee {
    public int salary;
}

public class Manager extends Employee {
    public int budget;
}

public class Director extends Manager {
    public int stockOptions;
}
```

And given the following `main` method:

```
public static void main(String[] args) {
    Employee employee = new Employee();
    Manager  manager  = new Manager();
    Director director = new Director();
    //line n1
}
```


Which two options fail to compile when placed at line n1 of the main method? (Choose two.)

A. employee.salary = 50_000;
B. director.salary = 80_000;
C. employee.budget = 200_000;
D. manager.budget = 1_000_000;
E. manager.stockOption = 500;
F. director.stockOptions = 1_000;

Correct Answer: CE
Section: (none)
Explanation

Explanation/Reference:

QUESTION 49

Given the code fragment:

```
int n [] [] = {{1, 3}, {2, 4 }};
for (int i = n.length-1; i >= 0; i--) {
    for (int y : n[i]) {
        System.out.print (y);
    }
}
```

What is the result?

A. 1324
B. 2313
C. 3142
D. 4231

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 50

Given:

```
class Caller {
    private void init () {
        System.out.println("Initialized");
    }

    private void start () {
    init();
    System.out.println("Started");
    }
}

public class TestCall {
    public static void main(String[] args) {
        Caller c - new Caller();
        c.start();
        c.init();
    }
}
```


What is the result?

A. An exception is thrown at runtime.
B. `Initialized Started`
   `Initialized`
C. `Initialized Started`
D. Compilation fails.

Correct Answer: D
Section: (none)
Explanation
Explanation/Reference:

QUESTION 51
Given the code fragment:

```
public static void main(String[] args) {
    try {
        int num = 10;
        int div = 0;
        int ans = nim / div;
    } catch (ArithmeticExeption ae) {
        ans = 0                                    // line n1
    } catch (Exception e) {
        System.out.println("Invalid calculation");
    }
    System.out.println("Answer = " + ans);        // line n2
}
```


What is the result?

A. `Answer = 0`
B. `Invalid calculation`
C. Compilation fails only at `line n1`.
D. Compilation fails only at `line n2`.
E. Compilation fails only at `line n1` and `line2`.

Correct Answer: E
Section: (none)
Explanation

Explanation/Reference:
QUESTION 52
Given:

```
public class Vowel {
    private char var;
    public static void main(String[] args) {
        char var1 = 'a';
        char var2 = var1;
        var2 = 'e';

        Vowel obj1 = new Vowel ();
        Vowel obj2 = obj1;
        obj1.var = 'i';
        obj2.var = 'o';

      System.out.println(var1 + ", " +var2);
      System.out.print(obj1.var + ", " +obj2.var);
    }
}
```


A. a, ei, o
B. a, eo, o
C. e, ei, o
D. e, e

o, o

Correct Answer: B
Section: (none)
Explanation
Explanation/Reference:

QUESTION 53
Given the code fragment:

```
if (aVar++ < 10) {
    System.out.println(aVar + " Hello World!");
} else {
    System.out.println(aVar + " Hello Universe!");
}
```

What is the result if the integer aVar is 9?

A. Compilation fails.
B. 10 Hello Universe!
C. 10 Hello World!
D. 9 Hello World!

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 54
Given the code fragment:

```
public static void main(String[] args) {
    int[][] arr = new int [2] [4];
    arr[0] = new int []{1, 3, 5, 7};
    arr[1] = new int []{1, 3};
    for (int[] a : arr) {
        for (int i : a) {
            System.out.print(i+ " ");
        }
        System.out.println();
    }
}
```

What is the result?

A. Compilation fails.

B.
```
1 3
1 3
1 3
```
followed by an ArrayIndexOutOfBoundsException

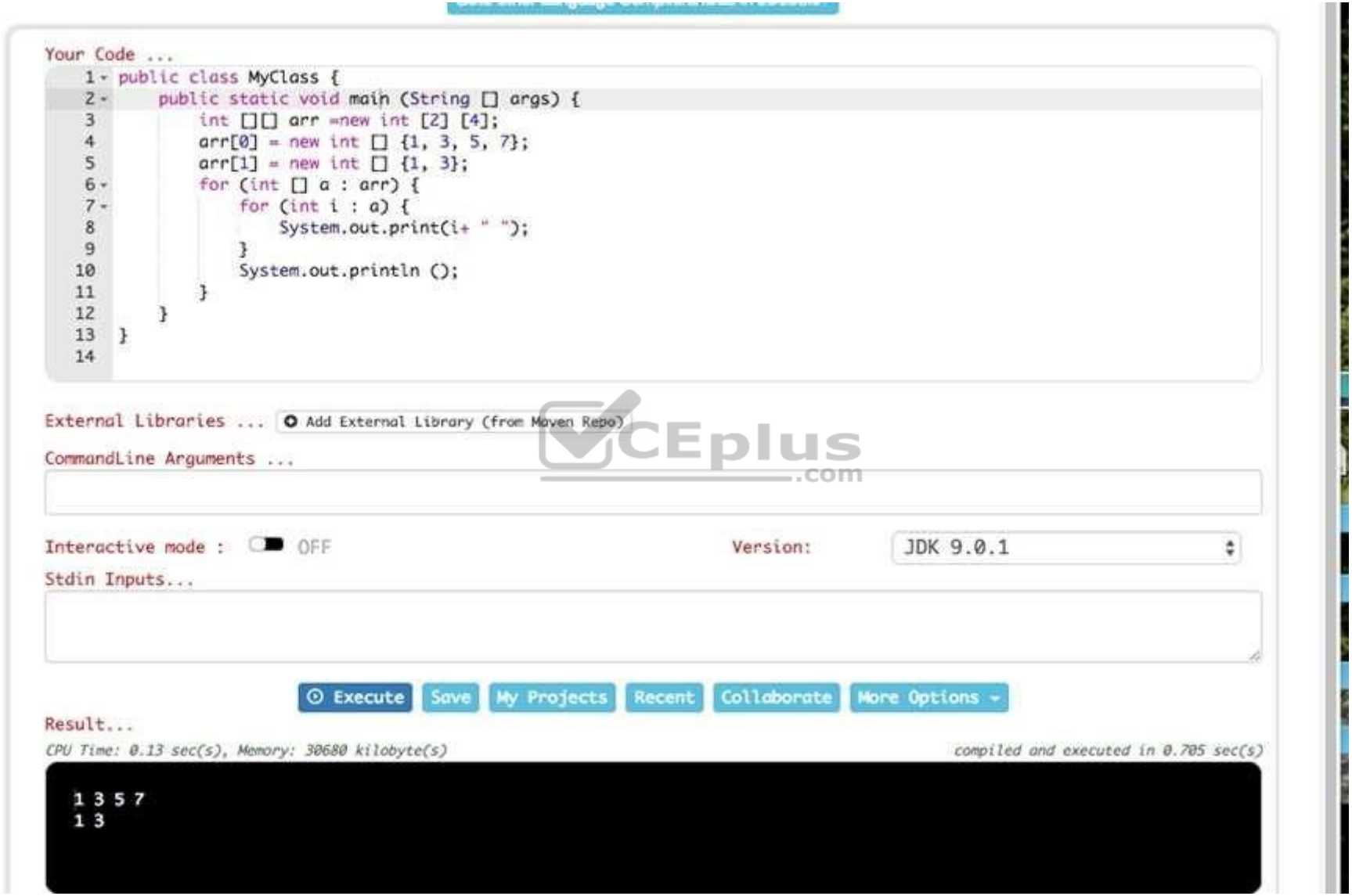
C.
```
1 3
1 3 0 0
1 3 5 7
1 3
```

D.

E.

Correct Answer: E
Section: (none)
Explanation

Explanation/Reference:
Explanation:



QUESTION 55
Given:

```
class Patient {
    String name;
    public Patient (String name) {
        this.name = name;
    }
}
```

And the code fragment:

```
8. public class Test {
9.     public static void main (String [] args) {
10.        List ps = new ArrayList ();
11.        Patient p2 = new Patient ("Mike);
12.        ps.add(p2);
13.
14.        // insert code here
15.
16.        if (f >= 0) {
17.            System.out.print ("Mike Found");
18.        }
19.    }
20. }
```

Which code fragment, when inserted at line 14, enables the code to print `Mike Found`?

```
int f = ps.indexOf (p2);
int f = ps.indexOf (Patient ("Mike") );
int f = ps.indexOf (new Patient "Mike") );
Patient p = new Patient ("Mike");
Int f = ps.indexOf (p)
```

A.

B. C.

D.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 56
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.

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

B. 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.

Correct Answer: E
Section: (none)
Explanation

Explanation/Reference:
QUESTION 57
Given the code fragments:

A. java:

```
package p1;
public class A {
}
```

B. java:

```
package p1.p2;
//line n1
public class B {
        public void doStuff () {
                A b = new A ();
        }
}
```

C. java


```
package p3;
//line n2
public class C {
        public static void main (String [] args) {
                A 01 = new A ();
                B 02 = new B ();
        }
}
```

Which modification enables the code to compile?

```
Replace line n1 with:
import p1.*;
Replace line n2 with:
import p1. p2.*;
```

```
Replace line n1 with:
import p1. A;
Replace line n2 with:
import p1.*;
```

```
Replace line n1 with:
import p1. A;
Replace line n2 with:
import p1. A;
import p1. p2.B ;
```

```
Replace line n1 with:
import p1;
Replace line n2 with:
import p1;
import p1. p2;
```

A.

B.

C.

D.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 58
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 [])

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 59
Which three statements are true about the structure of a Java class? (Choose three.)

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 components of a class.
F. The fields need not be initialized before use.

Correct Answer: ACE
Section: (none)
Explanation

Explanation/Reference:

QUESTION 60
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 01
Result B 3
```

```
Result A 1
Result B 12
```

```
Result A 1
Result B 3
```

```
Result A 01
Result B 12
```

B. C.

D.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 61
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: 1`
D. `Welcome Visit Count:1 Welcome Visit Count: 2`

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
QUESTION 62
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. 5 : 5
B. 10 : 10
C. 5 : 10
D. Compilation fails.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

Reference:

Version - JDK 1.8.0_66

Your Code ...

```
1  public class Test {
2
3          static int count = 0 ;
4          int i = 0;
5
6          public void changecount () {
7              while (i<5) {
8                  i++;
9                  count++;
10             }
11         }
12     public static void main (String [ ] args) {
13         Test check1 = new Test () ;
14         Test check2 = new Test () ;
15         check1.changecount () ;
16         check2.changecount () ;
17         System.out. print (check1.count + " : " + check2.count) ;
18     }
19 }
20
```


External Libraries ... Add External Library (from Maven Repo)

cs1.keyboard

Input Arguments (args of Main Method)...

Interactive mode : OFF

Stdin Inputs...

Execute | Save | My Projects | Recent | Collaborate | Others | Goto Another Language/DB

Result...

compiled and executed in 1.357 second(s)

```
10 : 10
```

QUESTION 63
Given the code fragment:

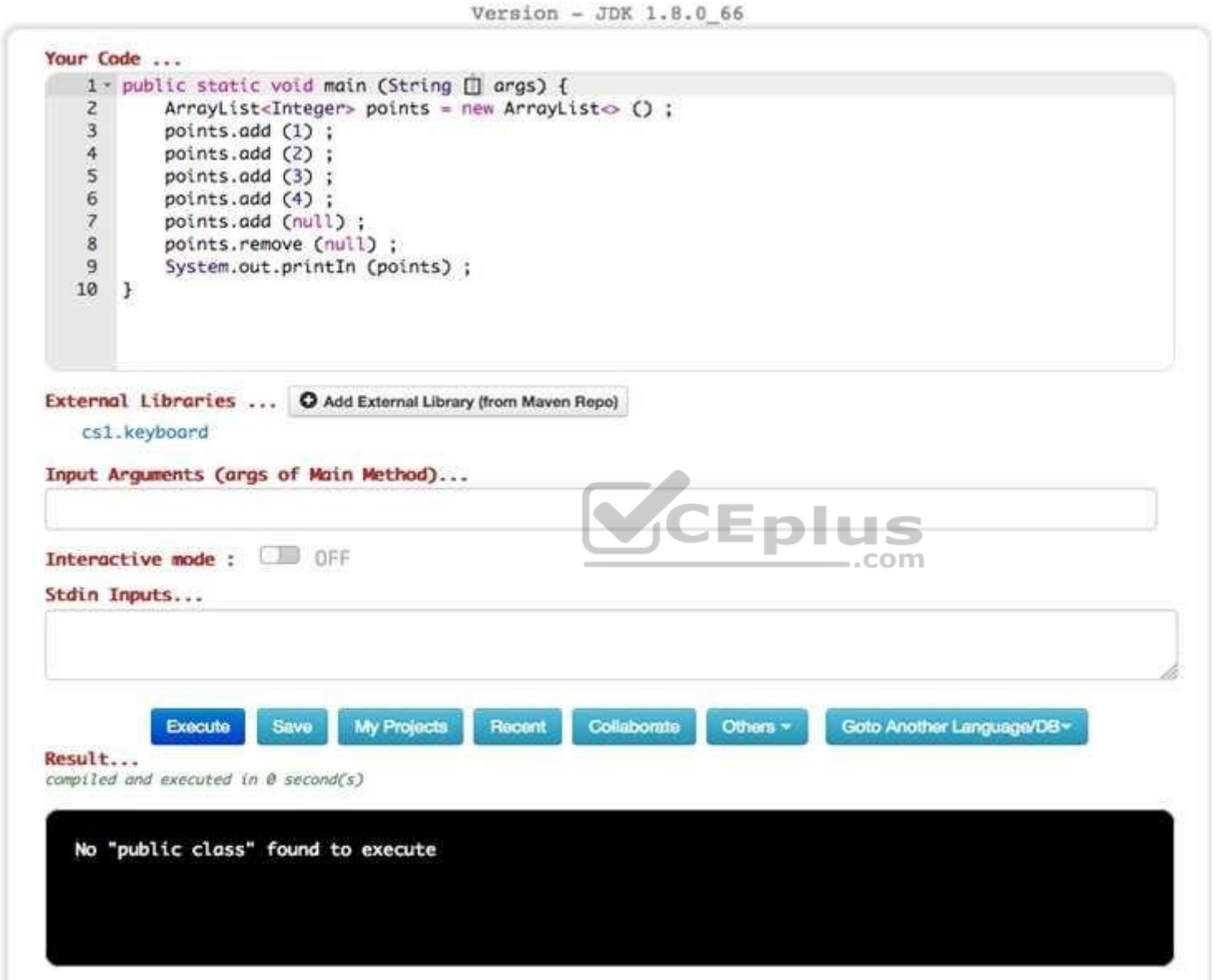
```
public static void main (String [] args) {
    ArrayList<Integer> points = new ArrayList<> ();
    points.add (1);
    points.add (2);
    points.add (3);
    points.add (4);
    points.add (null);
    points.remove (2);
    points.remove (null);
    System.out.println(points);
}
```


What is the result?

A. A NullPointerException is thrown at runtime.
B. [1, 2, 4]
C. [1, 2, 4, null]
D. [1, 3, 4, null]
E. [1, 3, 4]
F. Compilation fails.

Correct Answer: F
Section: (none)
Explanation

Explanation/Reference:
Explanation:



QUESTION 64 Given:

```
class Test {
   public static void main (String [] args) {
        int numbers [ ];
        numbers = new int [2];
        numbers [0] = 10;
        numbers [1] = 20;

        numbers = new int [4];
        numbers [2] = 30;
        numbers [3] = 40;
        for (int x : numbers) {
            System.out.print (" " + x) ;
        }
   }
}
```


What is the result?

A. 10 20 30 40
B. 0 0 30 40
C. Compilation fails.
D. An exception is thrown at runtime.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 65
Which code fragment causes a compilation error?
A. `float flt = 100F;`

B.
```
float flt = (float) 1_11.00;
```
C.
```
float flt = 100;
```
D.
```
double y1 = 203.22;
float flt = y1;
```
E.
```
int y2 = 100;
float flt = (float) y2;
```

Correct Answer: D
Section: (none)
Explanation

Explanation/Reference:

QUESTION 66
Which three statements are true about exception handling? (Choose three.)

A. Only unchecked exceptions 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 subclasses of the Exception class except the RuntimeException class are checked exceptions.
F. All subclasses of the Error class are checked exceptions and are recoverable.

Correct Answer: CEF
Section: (none)
Explanation

Explanation/Reference:

QUESTION 67
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, prints 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 DE. Option E

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 68
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

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
QUESTION 69
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);
    }
}
```

https://vceplus.com/ What is the result?

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

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
QUESTION 70
Given the code fragment:

```
public static void main (String[ ] args) {
    int data [] = {2010, 2013, 2014, 2015, 2014};
    int key = 2014;
    int count = 0;
    for (int e: data) {
        if (e! = key) {
            continue:
            count++;
        }
    }
    System.out.print (count + "Found");
}
```

What is the result?

A. Compilation fails.
B. 0 Found
C. 1 Found
D. 3 Found

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 71
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

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 72
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. A NullPointerException is thrown at runtime.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

QUESTION 73

Given the following class:

```
public class CheckingAccount {
    public int amount:
    // line n1
}
```

And given the following main method, located in another class:

```
public static void main (String [] args) {
    CheckingAccount acct = new CheckingAccount ();
    //line n2
}
```

Which three pieces of code, when inserted independently, set the value of amount to 100?

A.

At line n1 insert:

```
public CheckingAccount(){
    amount = 100;
}
```

At line n2 insert:

```
this.amount = 100;
```

B.

At line n2 insert:

```
amount = 100;
```

C.

At line n1 insert:

```
public CheckingAccount(){
    this.amount = 100;
}
```

At line n2 insert:

```
acct.amount = 100;
```

At line n1 insert:

```
public CheckingAccount(){
    acct.amount = 100;
}
```

D.

E.

F.

Correct Answer: CDE
Section: (none)
Explanation

Explanation/Reference:

QUESTION 74
Given the code fragment:

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

What is the result?

A. An exception is thrown at runtime.
B. Compilation fails.
C. 13480.0
D. 13480.02

Correct Answer: C
Section: (none)
Explanation
Explanation/Reference:

QUESTION 75
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

Correct Answer: D
Section: (none)
Explanation
Explanation/Reference:

QUESTION 76
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

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

QUESTION 77
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.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 78
Given the code fragment:

```
int wd = 0;
String days[] = ("sun", "mon", "wed", "sat");
for (String s:days) {
     switch (s) {
          case "sat":
          case "sun":
               wd -= 1:
               break;
          case "mon":
               wd++;
          case "wed":
               wd += 2;
     }
}
System.out.println(wd);
```

What is the result?

A. 3
B. 4
C. -1
D. Compilation fails.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
QUESTION 79
Given:

```
public class App {
      public static void main(String[] args) {
            int i = 10;
            int j = 20;
            int k = j += i / 5;
            System.out.print(i + " : " + j + " : " + k);
      }
}
```


What is the result?

A. 10 : 30 : 6
B. 10 : 22 : 22
C. 10 : 22 : 20
D. 10 : 22 : 6

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:
Explanation

Your Code ...

```
1  public class App {
2      public static void main (String[] args) {
3          int i = 10;
4          int j = 20;
5          int k = j += i / 5;
6          System.out.print (i + " : " + j + " : " + k);
7      }
8  }
9
```

External Libraries ... Add External Library (from Maven Repo)

CommandLine Arguments ...

Interactive mode : OFF Version: JDK 9.0.1

Stdin Inputs...

Execute Save My Projects Recent Collaborate More Options

Result...

CPU Time: 0.20 sec(s), Memory: 32080 kilobyte(s) *compiled and executed in 1.229 sec(s)*

```
10 : 22 : 22
```

QUESTION 80

Given:

```
interface Downloadable {
      public void download();
}

interface Readable extends Downloadable {          // line n1
      public void readBook();
}

abstract class Book implements Readable {          // line n2
      public void readBook() {
            System.out.println("Read Book");
      }
}

class EBook extends Book {                         // line n3
      public void readBook() {
            System.out.println("Read E-Book");
      }
}
```


And given the code fragment:

```
Book book1 = new EBook();
boook1.readBook();
```

What is the result?

A. Compilation fails at line n2.
B. Read Book
C. Read E-Book
D. Compilation fails at line n1.
E. Compilation fails at line n3.

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

QUESTION 81
Given the code fragment:

```
13. List colors = new ArrayList();
14. colors.add("green");
15. colors.add("red");
16. colors.add("blue");
17. colors.add("yellow");
18. colors.remove(2);
19. colors.add(3, "cyan");
20. System.out.print(colors);
```


What is the result?

A. `(green, red, yellow, cyan)`
B. `(green, blue, yellow, cyan)`
C. `(green, red, cyan, yellow)`
D. An `IndexOutOfBoundsException` is thrown at runtime.

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:

QUESTION 82
Given the code fragment:

```
abstract class Toy {
      int price;
      // line n1
}
```

Which three code fragments are valid at line n1? (Choose three.)

A.

```
public static void insertToy() {
      /* code goes here */
}
```

B.

```
public abstract Toy getToy() {
      return new Toy();
}
```

C.

```
public void printToy();
```

D.

```
public int calculatePrice() {
      return price;
}
public abstract int computeDiscount();
```

E.

Correct Answer: CDE
Section: (none)
Explanation

Explanation/Reference:

QUESTION 83
Given:

```
public class Test {
      int x, y;

      public Test(int x, int y) {
            initialize(x, y);
      }

      public void initialize(int x, int y) {
            this.x = x * x;
            this.y = y * y;
      }

      public static void main(String[] args) {
            int x = 3, y = 5;
            Test obj = new Test(x, y);
            System.out.println(x + " " + y);
      }
}
```

What is the result?

A. Compilation fails.

B. 3 5
C. 0 0
D. 9 25

Correct Answer: B
Section: (none)
Explanation

Explanation/Reference:

QUESTION 84
Given the code fragment:

```
public static void main(String[] args) {
      int array[] = {10, 20, 30, 40, 50};
      int x = array.lenth;
      /* line n1 */
}
```

Which two code fragments can be independently inserted at line n1 to enable the code to print the elements of the array in reverse order? (Choose two.)

A.

```
while (x > 0) {
     x--;
     System.out.print(array[x]);
}
```

B.

```
do {
     x--;
     System.out.print(array[x]);
} while (x >= 0);
```

C.

```
while (x >= 0) {
     System.out.print(array[x]);
     x--;
}
```



```
do {
     System.out.print(array[x]);
     --x;
} while (x >= 0);
```

D.

```
while (x > 0) {
     System.out.print(array[--x]);
}
```

E.

Correct Answer: AE
Section: (none)
Explanation

Explanation/Reference:

QUESTION 85
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.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:
QUESTION 86
Given:

```
class Student {
      String name;
      public Student(String name) {
            this.name = name;
      }
}

public class Test {
      public static void main(String[] args) {
            Student[] students = new Student[3];
            students[1] = new Student("Richard");
            students[2] = new Student("Donald");
            for (Student s : students) {
                  System.out.println("" + s.name);
            }
      }
}
```


What is the result?

A. `null Richard Donald`
B. `Richard Donald`
C. Compilation fails.
D. An `ArrayIndexOutOfBoundsException` is thrown at runtime.
E. A `NullPointerException` is thrown at runtime.

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 87
Given:

```
public class Test {
      public static void main(String[] args) {
            int x = 1;
            int y = 0;
            if(x++ > ++y) {
                  System.out.print("Hello ");
            } else {
                  System.out.print("Welcome ");
            }
            System.out.print("Log " + x + ":" + y);
      }
}
```


What is the result?

A. Hello Log 1:0
B. Hello Log 2:1
C. Welcome Log 2:1
D. Welcome Log 1:0

Correct Answer: C
Section: (none)
Explanation

Explanation/Reference:
QUESTION 88
Given the code snippet from a compiled Java source file:

```
public class MyFile
{
      public static void main (String[] args)
      {
            String arg1 = args[1];
            String arg2 = args[2];
            String arg3 = args[3];
            System.out.println("Arg is " + arg3);
      }
}
```

Which command-line arguments should you pass to the program to obtain the following output?

```
Arg is 2
```

A. java MyFile 1 3 2 2
B. java MyFile 2 2 2
C. java MyFile 1 2 2 3 4
D. java MyFile 0 1 2 3

Correct Answer: A
Section: (none)
Explanation

Explanation/Reference:

QUESTION 89
Given the code fragment:

```
public static void main(String[] args) {
      int[] arr = (1, 2, 3, 4);
      int i = 0;
      do {
            System.out.print(arr[i] + " ");
            i++;
      } while (i < arr.length - 1);
}
```

What is the result?

A. 1 2 3 4followed by an ArrayIndexOutOfBoundsException
B. 1 2 3
C. 1 2 3 4
D. Compilation fails.

Correct Answer: A
Section: (none)

Explanation

Explanation/Reference: