```
## Q. Which of the follwing below live on the heap in java?
* Class
* Instance variable
* Method
* Object
## Q. Which of the following interface is used to declare core methods in java?
* Set
* EventListner
* Collection
* Comparator
## Q. Which of these interface handle sequences?
* Set
* List
* Comparator
* Collection
## Q. Which of this interface must contain a unique element?
* Set
* List
* Array
* Collection
## Q. Which of the following declarations does not compile?
A. double num1, int num2 = 0;
B. int num1, num2;
C. int num1, num2 = 0;
D. int num1 = 0, num2 = 0;
## Q. What is the output of following program?
```java
public class Test {
       public static void main(String[] args) {
              for(int i = 0; i < 5; i++) {
                      System.out.println(i + ' ');
               }
       }
output:32
33
34
35
36
```

```
## Q. What is the output of following program?
```java
import java.util.ArrayList;
public class Test {
       public static void main(String[] args) {
               ArrayList arrList = new ArrayList();
               arrList.add(1);
               arrList.add('1');
               arrList.add("1");
               System.out.println(arrList);
       }
output: [1,1,1]
## Q. What is the output of following program?
```java
public class Test {
       public static void main(String[] args) {
               for(int i=0; 0; i++) {
                       System.out.println("Hello World!");
       }
output:Exception
## Q. Which statement about a valid .java file is true?
**A.** It can only contain one class declaration.
**B.** It can contain one pulic class declaration and one public interface definition.
**C.** It must define at least one public class.
**D.** It may define at most one public class.
## Q. What is the output of following program?
```java
public class Test {
  private static int one = 10;
  int two = 20;
  public static void main(String []args) {
       Test test = new Test();
       int today = 20; two = 40;
       System.out.println(today + test.two + test.one);
  }
output:error
```

```
## Q. What is the output of following program?
```java
public class Test{
       static int start = 2;
       final int end;
       public Test(int x) {
              x = 4;
              end = x;
       }
       public void fly(int distance) {
               System.out.println(end-start+" ");
               System.out.println(distance);
  public static void main(String []args){
       new Test(10).fly(5);
  }
}
output : [2,5]
## Q. What is the output of following program?
```java
public class Test
  public static void main(String a[]) {
       try {
              int val = 10/0;
       } catch(Exception e) {
               System.out.println(e);
       } catch(ArithmeticException ae) {
               System.out.println(ae);
       }
  }
Exception
## Q. What is the output of following program?
```java
public class Test
  static void charNum(String inputString) {
       HashMap<Character, Integer> charMap = new HashMap<Character, Integer>();
       char[] strArray = inputString.toCharArray();
       for(char c: strArray) {
              if(charMap.containsKey(c)) {
```

```
charMap.put(c, charMap.get(c)+1);
              } else {
                      charMap.put(c, 1);
       }
       Set<Character> charInString = charMap.keySet();
       for(Character ch: charInString) {
              if(charMap.get(ch) > 1) {
                      System.out.println(ch +" : "+ charMap.get(ch));
       }
  }
       public static void main(String[] args) {
    charNum("JavaJ2Ee");
}
## Q. Which of the following declarations does not compile?
A. double num1, int num2 = 0;
B. int num1, num2;
C. int num1, num2 = 0;
D. int num1 = 0, num2 = 0;
## Q. What is the output of the following?
```java
public static void main(String... args) {
  String chair, table = "metal";
  chair = chair + table;
  System.out.println(chair);
}
A. metal
B. metalmetal
C. nullmetal
D. The code does not compile
## Q. Which is correct about an instance variable of type String?
A. It defaults to an empty string.
B. It defaults to null.
C. It does not have a default value.
D. It will not compile without initializing on the declaration line
## Q. How many of the following methods compile?
```java
public class Test
       public String convert(int value) {
              return value.toString();
```

```
public String convert(Integer value) {
               return value.toString();
   }
       public String convert(Object value) {
               return value.toString();
       }
       public static void main(String... args) {
               Test obj = new Test();
               System.out.println(obj.convert(10));
       }
}
A. None
B. One
C. Two
D. Three
## Q. Which of the following does not compile?
A. int num = 999;
B. int num = 9_9_9;
C. int num = _{9}_{9};
D. None of the above; they all compile.
## Q. Which is the first line to trigger a compiler error?
```java
double d1 = 5f; // p1
double d2 = 5.0; // p2
float f1 = 5f; // p3
float f2 = 5.0; // p4
A. p1
B. p2
C. p3
D. p4
## Q. How many instance initializers are in this code?
```java
public class Bowling {
   System.out.println();
public Bowling () {
  System.out.println();
static {
  System.out.println();
```

```
System.out.println();
A. None
B. One
C. Two
D. Three
## Q. What is true of the finalize() method?
A. It may be called zero or one times.
B. It may be called zero or more times.
C. It will be called exactly once.
D. It may be called one or more times.
## Q. Which of the following is true about primitives?
A. You can call methods on a primitive.
B. You can convert a primitive to a wrapper class object simply by assigning it.
C. You can convert a wrapper class object to a primitive by calling valueOf().
D. You can store a primitive directly into an ArrayList.
## Q. What is the output of the following?
```java
Integer integer = new Integer(4);
System.out.print(integer.byteValue());
System.out.print("-");
int i = new Integer(4);
System.out.print(i.byteValue());
A. 4-0
B. 4-4
C. The code does not compile.
D. The code compiles but throws an exception at runtime
## Q. Which two primitives have wrapper classes that are not merely the name of the primitive with an
uppercase letter?
A. byte and char
B. byte and int
C. char and int
D. None of the above
## Q. How do you force garbage collection to occur at a certain point?
A. Call System.forceGc()
B. Call System.gc()
C. Call System.requireGc()
D. None of the above
```

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## Q. How many of the String objects are eligible for garbage collection right before the end of the
main method?
```java
public static void main(String[] fruits) {
 String fruit1 = new String("apple");
 String fruit2 = new String("orange");
 String fruit3 = new String("pear");
 fruit3 = fruit1;
 fruit2 = fruit3;
 fruit1 = fruit2;
A. None
B. One
C. Two
D. Three
## Q. Which of the following does not compile?
A. double num = 2.718;
B. double num = 2._718;
C. double num = 2.7_{1_8};
D. None of the above; they all compile
## Q. Which of the following is the output of this code, assuming it runs to completion?
```java
public class Toy {
 public void play() {
       System.out.print("play-");
 public void finalizer() {
       System.out.print("clean-");
 public static void main(String[] fun) {
       Toy car = new Toy();
       car.play();
       System.gc();
       Toy doll = new Toy();
       doll.play();
 }
}
A. play-
B. play-play-
C. play-clean-play-
D. play-play-clean-clean-
## Q. What is the value of tip after executing the following code snippet?
 `java
```

```
int meal = 5;
int tip = 2;
int total = meal + (meal>6 ? ++tip : --tip);
A. 1
B. 2
C. 3
D. 6
## Q. What is the output of the following application?
```java
String john = "john";
String jon = new String(john);
System.out.println((john==jon) + " "+ (john.equals(jon)));
A. true true
B. true false
C. false true
D. false false
```