Question - 1
Find Duplicate elements from among 2 arrays

SCORE: **40 points**

#Duplicate

Given 2 Lists of integer as input to the function, return a
Sorted List (Descending) containing integers common to both input
Lists.

Eg:
input 1 [2, 3, 5, 7, 27, 1, 6]
input 2 [8, 55, 77, 5, 9, 6, 1]
answer [6, 5, 1]

Explanation:
- the elements -1, -6 and 5 are present in both the input lists
- the returned values need to be in descending order thus, 5 (highest) to
-1 (lowest).

Assumptions:
no element in input arrays would be repeated.

Question - 2
Inheritance

SCORE: **10 points**

```
class A {
    public static int eval(int a, int b){
      return a + b;
    }
}
class B extends A{
      public static int eval(int a, int b, int
c){
      return a * b * c;
    }
}
class C extends B {
      public static void main(String args[]) {
              System.out.println("Sum = " +
eval(2,3,2));
          }
}
```

- ○ Sum = 10

- ○ Sum = 7

- ● Sum = 12

- ○ Product = 10

Help

Question - 3

Application Development   Java

Which of the following statement is true about the code below?

```
class A {
   int a;
   public A(int x){a = x;}
};

class B{
   int b;
   public B(int x):b(x){}
};
```

○ Class A and Class B constructors represent two ways of initializing the member variables.

○ Class B object would initialize faster.

● Class B object initialization is invalid Java syntax.

○ Depends on the compiler

Question - 4
String Matching

String s = "superman";
String b = "batman";
String s1 = "superman";

if (s == b){
   System.out.println("Bruce is Superman");
} else if(s == s1){
   System.out.println("Clark is Superman !!!");
} else if(s1 == s){
   System.out.println("is Clark Superman ???");
}

System.out.println("we love RDJ");

○ Clark is Superman !!! we love RDJ

○ Clark is Superman !!! is Clark Superman ??? we love RDJ

○ Bruce is Superman

● we love RDJ

Question - 5

Question X

What's the output when *printAnswer()* is invoked ?

```
private void printAnswer() {
  //.getName() method returns value set using .setName()

  Person p1 = new Person();
  p1.setName("name-1");

  Person p2 = p1;
  p2.setName("name-2");

  System.out.println(p1.getName());
  System.out.println(p2.getName());

}
```

   ◯   name1 name2

   ◯   name-1 name-2

   ◯   name1 name-2

   ◉   name-2 name-2

Question - 6
Storage

SCORE: **10 points**

Which interface provides the capability to store objects using a key-value pair?

   ◉   Java.util.Map

   ◯   Java.util.Set

   ◯   Java.util. List

   ◯   Java.util.Collection

Question - 7
Increment Decrement Operators

SCORE: **10 points**

```
class Solution{
   public static void main(String[] args){
      int a = 10;
      System.out.println("ABC " + (--a) + (a--));
      int b = a;
      System.out.println("ABC " + (b--) + (--b));
   }
}
```

   ◯

Compilation Error. Post-Increment and Pre-increment operators used in a wrong way

○ Program would run. Output : ABC 98 ABC 76

○ Program would run. Output : ABC 99 ABC 66

◉ Program would run. Output : ABC 99 ABC 86

Compilation Error. Post-Increment and Pre-increment operators used in a wrong way

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