Q1)

/\*\*

Write a Java program to find the duplicate values of an array of integer

values.

 \*/

import java.util.Arrays;

public class duplicate{

  public static void main(String[] args)

    {

        int[] arr = {1, 2, 5, 5, 6, 6, 7, 2};

        for (int i = 0; i < arr.length-1; i++)

        {

            for (int j = i+1; j < arr.length; j++)

            {

                if ((arr[i] == arr[j]) && (i != j))

                {

                    System.out.println("Duplicate Element : "+arr[j]);

                }

            }

        }

    }

}

Output:

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$ java find\_duplicate\_values\_in\_array.java

Duplicate Element : 2

Duplicate Element : 5

Duplicate Element : 6

Q2)

/\*\*

Write a Java program to find the second smallest element in an array.

 \*/

public class SecondSmallestInArray{

public static int getSecondSmallest(int[] a, int total){

int temp;

for (int i = 0; i < total; i++)

        {

            for (int j = i + 1; j < total; j++)

            {

                if (a[i] > a[j])

                {

                    temp = a[i];

                    a[i] = a[j];

                    a[j] = temp;

                }

            }

        }

       return a[1];

}

public static void main(String args[]){

int a[]={1,2,5,6,3,2};

System.out.println("Second smallest: "+getSecondSmallest(a,6));

}}

OutPut:

$ java second\_smallest\_element\_in\_array.java

Second smallest: 2

Second smallest: 33

Q3)

/\*\*

Write a Java program to replace all the 'd' characters with 'f' characters.

Input : “The quick brown fox jumps over the lazy dog”

 \*/

 public class replace {

   public static void main(String[] args)

    {

        String str = "The quick brown fox jumps over the lazy dog.";

        String new\_str = str.replaceAll("d", "f");

        System.out.println("Original string: " + str);

        System.out.println("New String: " + new\_str);

    }

}

Output:

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$ java replace\_chars.java

Original string: The quick brown fox jumps over the lazy dog.

New String: The quick brown fox jumps over the lazy fog.

Q4)

/\*\*

Write a Java program to use the try and catch and finally block.

 \*/

public class ExceptionHandling {

    public static void main(String[] args) {

       try {

          int i = 10/0;

       }

       catch(Exception ex){

          System.out.println("Catch Block Called");

       }

       finally {

          System.out.println("Finally Block");

       }

    }

 }

Output:

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$ java try\_catch\_finally.java

Catch Block Called

Finally Block

Q5)

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 \* 5. Write a Java Program to raise NullPointerException

 \*/

public class nullPointer {

    public static void main(String[] args) {

       Object ref = null;

       ref.toString();

    }

 }

Output:

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$ java null\_pointer.java

Exception in thread "main" java.lang.NullPointerException

at nullPointer.main(null\_pointer.java:11)