

KING SAUD UNIVERSITY
COLLEGE OF COMPUTER AND INFORMATION SCIENCES
COMPUTER SCIENCE DEPARTMENT

**CSC 113: Computer
Programming II**

Midterm 2 (Duration: 1:50)

2nd Semester 1439-1440

Student Name (Arabic)	Student ID	Section Number	Serial Number

Question1: Consider the following Java program

(6 Pts.)

```
1 import java.util.*;
2 import java.io.*;
3
4 class Ex2 extends FileNotFoundException {
5 public Ex2 (String m) {super(m); } }
6
7 public class Mid2 {
8
9 public static void main(String args[]) {
10     Scanner scan =new Scanner (System.in);
11     try{
12         System.out.println("Lets go:");
13         int x=scan.nextInt();
14         int y=scan.nextInt();
15         String z=scan.next();
16         System.out.println("Calling the methods:");
17         isThere(z);
18         M1 (x,y);
19         String arr[] = new String [2];
20         arr[0] = z;
21         System.out.println(arr[1].toString());
22         System.out.println("See you soon");
23     }
24     catch(InputMismatchException e){
25         System.out.println("Catch1:InputMismatchException");}
26     catch(ArithmeticException e){
27         System.out.println("Catch 2: ArithmeticException");}
28     catch(RuntimeException e){
29         System.out.println("Catch 3:RuntimeException");}
30     catch(Exception e){
31         System.out.println("Catch 4: " +e.getMessage());}
32     finally{ System.out.println("Finally of main");}
33 }
34
35 public static Boolean isThere (String s)throws IOException
36     {System.out.println("Testing the file");
37     if (!s.equals("file.data")){
38         throw new Ex2("Not there");
39         System.out.println("File");
40         return true;}
41
42 public static void M1 (intx,int y)throws Exception
43     {
44     try{
45     try{
46     int r=x/y;
47     }
48     catch (NumberFormatException e)
49         {System.out.println(e);}
50     }
51     finally{ System.out.println("Finally of M1");}
52     System.out.println("End of method M1");
53     }
54 }
```

Assume the user's input for the three declared variables x, y, and z will be as shown in the following table, show the program output for each user input and if an exception is thrown at what line:

X	Y	Z	Output	The exception is thrown at line number
1	two	file.data	Lets go: Catch1:InputMismatchException Finally of main	14
2	4	Text.data	Lets go: Calling the methods: Testing the file Catch 4: Not there Finally of main	38
1	0	file.data	Lets go: Calling the methods: Testing the file File Finally of M1 Catch 2: ArithmeticException Finally of main	46
12	-2	file.data	Lets go: Calling the methods: Testing the file File Finally of M1 End of method M1 Catch 3:RuntimeException Finally of main	21

Question2: Answer the following Multiple Choices**(4 Pts.)**

1	2	3	4	5	6	7	8
A	A	C	B	C	B	B	A

<p>1. Considering the code from Q1, removing <code>throws</code> Exception from the header of M1 will Not affect the code?</p> <p>A. True B. False</p>	<p>2. An <i>Interface</i> is a reference type, so we can write a method that accept a parameter of type interface.</p> <p>A. True B. False</p>
<p>3. What is the output of following Java program?</p> <pre>Public class Test{ Public static void main (String[] args){try { System.out.printf("1"); int sum = 9 / 0; System.out.printf("2"); } catch(ArithmeticException e) { IOException obj = new IOException ("Oops"); try { throw obj; } catch(Exception e1) { System.out.printf("8"); } } finally { System.out.printf("3"); } System.out.printf("4"); } }</pre> <p>A. Compilation error B. Runtime error C. 1834 D. 134</p>	<p>4. What is the output of following Java program?</p> <pre>import java.io.*; public class Files { Public static void main(String args[]) { File obj = new File("/java/system"); System.out.print(obj.getName()); } }</pre> <p>A. java B. system C. java/system D. /java/system</p>
<p>5. Which of these exceptions is thrown in cases when the file specified for reading is not found?</p> <p>A. IOException B. FileNotFoundException C. FileNotFountException D. FileInputException</p>	<p>6. After an exception is handled, program control returns to the throw point to complete its normal execution?</p> <p>A. True B. False</p>

7. Binary files are human readable in text editors? A. True B. False	8. <code>public class</code> one <code>extends</code> two <code>implements</code> three, four is a correct class header ? A. True B. False