**IIG Varsity**

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Test: **IIG-FND-002**, Time: **2 hours**, Date: **18-08-2022** \_\_\_Asutosh Parida\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Section-1** (Answer any 4 questions) Mark: 60

Upload the program to your GitHub repository in your respective folder at

https://github.com/milandas63/IIG-batch1

1. Write a program to insert “r” after every vowel in the string below:

**Quick Brown Fox Jumps Over The Lazy Dog**

Output: Qurirck Brorwn Forx Jurmps Orverr Ther Larzy Dorg

1. Repeatatively sum all digits of a number to determine the unisum (single digit)?

Example:

728394 = 7+2+8+3+9+4 = 33 = 3+3 = 6

9778911223 = 9+7+7+8+9+1+1+2+2+3 = 49 = 4+9 = 13 = 1+4 = 4

Print the final result only.

1. Print the next 5 number in the series:

1, 3, 5, 11, 21, ...... (n, n\*2+1, n\*2-1, ......

1. Write a program to print the following figure?

\*

\* \*

\* \*

\* \*

\* \*

\* \*

\* \*

\* \*

\* \*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

1. Write a program to reverse each work in the sentence:

Original: **We are students of IIG Varsity**

Output: **eW era stneduts fo GII ytisraV**

**Section-2** (Answer all questions) Mark: 40

Colour the right answer to blue colour

1. Which of the following option leads to the portability and security of Java?
2. Bytecode is executed by JVM
3. The applet makes the Java code secure and portable
4. Use of exception handling
5. Dynamic binding between objects
6. Which of the following is not a Java features?
7. Dynamic
8. Architecture Neutral
9. Use of pointers
10. Object-oriented
11. Which of these keywords is used to define packages in Java?
12. pkg
13. Pkg
14. package
15. Package
16. Which of these is a mechanism for naming and visibility control of a class and its content?
17. Object
18. Packages
19. Interfaces
20. None of the Mentioned
21. Which of this access specifies can be used for a class so that its members can be accessed by a different class in the same package?
22. public
23. protected
24. No access-specifier
25. All of the mentioned
26. Which of these access specifiers can be used for a class so that its members can be accessed by a different class in the different package?
27. public
28. protected
29. private
30. No access-specifier
31. Which of the following is the correct way of importing an entire package ‘pkg’?
32. import pkg.
33. Import pkg.
34. import pkg.\*
35. Import pkg.\*
36. Which of the following is an incorrect statement about packages?
37. Package defines a namespace in which classes are stored
38. A package can contain another package within it
39. Java uses file system directories to store packages
40. A package can be renamed without renaming the directory in which the classes are stored
41. Which of the following package stores all the standard java classes?
42. lang
43. java
44. util
45. java.packages
46. What will be the output of the following Java program?

package pkg;

class display {

int x;

void show() {

if (x > 1)

System.out.print(x + " ");

}

}

class packages {

public static void main(String args[]) {

display[] arr = new display[3];

for(int i=0;i<3;i++)

arr[i]=new display();

arr[0].x = 0;

arr[1].x = 1;

arr[2].x = 2;

for (int i=0; i<3; ++i)

arr[i].show();

}

}

}

NOTE : packages.class file is in directory pkg;

1. 0
2. 1
3. 2
4. 0 1 2
5. What will be the output of the following Java program?

package pkg;

class output {

public static void main(String args[]) {

StringBuffer s1 = new StringBuffer("Hello");

s1.setCharAt(1, 'x');

System.out.println(s1);

}

}

1. xello
2. xxxxx
3. Hxllo
4. Hexlo
5. What will be the output of the following Java program?

package pkg;

class Output {

public static void main(String args[]) {

StringBuffer s1 = new StringBuffer("Hello World");

s1.insert(6 , "Good");

System.out.println(s1);

}

}

NOTE : Output.class file is not in directory pkg.

1. Hello Good World
2. HellGoodoWorld
3. Compilation error
4. Runtime error
5. String in Java is a?
6. class
7. object
8. variable
9. character array
10. Which of these methods of String class is used to obtain character at specified index?
11. char(i)
12. Charat(i)
13. charat(i)
14. charAt(i)
15. Which of these keywords is used to refer to member of base class from a subclass?
16. upper
17. super
18. this
19. none of the mentioned
20. Which of these method of String class can be used to test to strings for equality?
21. isequal()
22. isequals()
23. equal()
24. equals()
25. Which of the following statements are incorrect?
26. String is a class
27. Strings in java are mutable
28. Every string is an object of class String
29. Java defines a peer class of String, called StringBuffer, which allows string to be altered
30. What will be the output of the following Java program?

class string\_demo {

public static void main(String args[]) {

String obj = "I" + "like" + "Java";

System.out.println(obj);

}

}

1. I
2. like
3. Java
4. IlikeJava
5. What will be the output of the following Java program?

class string\_class {

public static void main(String args[]) {

String obj = "I LIKE JAVA";

System.out.println(obj.charAt(3));

}

}

1. I
2. L
3. K
4. E
5. What will be the output of the following Java program?

class string\_class {

public static void main(String args[]) {

String obj = "I LIKE JAVA";

System.out.println(obj.length());

}

}

1. 9
2. 10
3. 11
4. 12
5. What will be the output of the following Java program?

class string\_class {

public static void main(String args[]) {

String obj = "hello";

String obj1 = "world";

String obj2 = obj;

obj2 = " world";

System.out.println(obj + " " + obj2);

}

}

1. hello hello
2. world world
3. hello world
4. world hello
5. What will be the output of the following Java program?

class string\_class {

public static void main(String args[]) {

String obj = "hello";

String obj1 = "world";

String obj2 = "hello";

System.out.println(obj.equals(obj1) + " " + obj.equals(obj2));

}

}

1. false false
2. true true
3. true false
4. false true
5. Which of this class is used to create an object whose character sequence is mutable?
6. String()
7. StringBuffer()
8. String() & StringBuffer()
9. None of the mentioned
10. Which of this method of class StringBuffer is used to concatenate the string representation to the end of invoking string?
11. concat()
12. append()
13. join()
14. concatenate()
15. Which of these method of class StringBuffer is used to find the length of current character sequence?
16. length()
17. Length()
18. capacity()
19. Capacity()
20. What is the string contained in s after following lines of Java code?

StringBuffer s new StringBuffer("Hello");

s.deleteCharAt(0);

(A) Hell

(B) ello

(C) Hel

(D) llo

1. Which of the following statement is correct?
2. reverse() method reverses all characters
3. reverseall() method reverses all characters
4. replace() method replaces first occurrence of a character in invoking string with another character
5. replace() method replaces last occurrence of a character in invoking string with another character
6. What will be the output of the following Java program?

class output {

public static void main(String args[]) {

String a = "hello i love java";

System.out.println(a.indexOf('e')+" "+a.indexOf('a')+" "+

a.lastIndexOf('l')+" "+a.lastIndexOf('e'));

}

}

1. 6 4 6 9
2. 5 4 5 9
3. 7 8 8 9
4. 1 14 8 15
5. What will be the output of the following Java program?

class output {

public static void main(String args[]) {

StringBuffer c = new StringBuffer("Hello");

c.delete(0,2);

System.out.println(c);

}

}

1. He
2. Hel
3. lo
4. llo
5. What will be the output of the following Java program?

class output {

public static void main(String args[]) {

StringBuffer c = new StringBuffer("Hello");

StringBuffer c1 = new StringBuffer(" World");

c.append(c1);

System.out.println(c);

}

}

1. Hello
2. World
3. Helloworld
4. Hello World
5. What will be the output of the following Java program?

class Output {

public static void main(String args[]) {

char c[]={'A', '1', 'b' ,' ' ,'a' , '0'};

for (int i=0; i<5; ++i) {

i++;

if(Character.isDigit(c[i]))

System.out.println(c[i]+" is a digit");

if(Character.isWhitespace(c[i]))

System.out.println(c[i]+" is a Whitespace character");

if(Character.isUpperCase(c[i]))

System.out.println(c[i]+" is an Upper case Letter");

if(Character.isLowerCase(c[i]))

System.out.println(c[i]+" is a lower case Letter");

i++;

}

}

}

1. a is a lower case Letter

is White space character

1. b is a lower case Letter

is White space character

1. 1 is a digit

a is a lower case Letter

1. a is a lower case Letter

0 is a digit

1. What is the output of the following fraction of Java code?

public class Output {

public static void main(String args[]) {

String s1 = new String("Hello");

String s2 = new String("Hellow");

System.out.println(s1 = s2);

}

}

1. Hello
2. Hellow
3. Throws an exception
4. None of these
5. What will be the output of the following Java program?

public class LogicalCompare {

public static void main(String args[]) {

String s1 = new String("OKAY");

String s2 = new String(s1);

System.out.println(s1 == s2);

}

}

1. true
2. false
3. 1
4. Displays error message
5. What will be output of the following program?

public class Test {

public static void main(String args[]) {

String s1 = "Java";

String s2 = "Java";

System.out.println(s1.equals(s2));

System.out.println(s1 == s2);

}

}

1. false true
2. false false
3. true false
4. true true
5. Determine the output of the following code?

public class Test {

public static void main(String args[]) {

String s1 = "SITHA";

String s2 = "RAMA";

System.out.println(s1.charAt(0) > s2.charAt(0));

}

}

1. true
2. false
3. 0
4. Throws Exception
5. What is the output of the following fragment of code?

public class Test {

public static void main(String args[]) {

String x = "hellow";

int y = 9;

System.out.println(x += y);

}

}

1. Throws an exception as string and int are not compatible for addition
2. hellow9
3. 9hellow
4. Compilation error
5. The toString() method is defined in which class?
6. java.lang.String
7. java.lang.Object
8. java.lang.util
9. None of these
10. In String class the method compareTo return?
11. true
12. false
13. an int value
14. -1
15. What will be the output?

String str = "abcde";

System.out.println(str.substring(1,3));

1. abc
2. bc
3. bcd
4. None of these
5. What should be the execution order, if a class has a method, static block, instance block, and constructor, as shown below?

public class First\_C {

public void myMethod() {

System.out.println("Method");

}

{

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

}

public void First\_C() {

System.out.println("Constructor");

}

static {

System.out.println("static block");

}

public static void main(String[] args) {

First\_C c = new First\_C();

c.First\_C();

c.myMethod();

}

}

1. Instance block, method, static block, and constructor
2. Method, constructor, instance block, and static block
3. Static block, method, instance block, and constructor
4. Static block, instance block, constructor, and method