**IIG Varsity**

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

**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>

* 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

* 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.

* Print the next 5 number in the series:

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

* Write a program to print the following figure?

\*

\* \*

\* \*

\* \*

\* \*

\* \*

\* \*

\* \*

\* \*

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

* 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?
* Bytecode is executed by JVM
* The applet makes the Java code secure and portable
* Use of exception handling
* Dynamic binding between objects
* 2.Which of the following is not a Java features?
* Dynamic
* Architecture Neutral
* Use of pointers
* Object-oriented
* 3.Which of these keywords is used to define packages in Java?
* pkg
* Pkg
* package
* Package
* 4.Which of these is a mechanism for naming and visibility control of a class and its content?
* Object
* Packages
* Interfaces
* None of the Mentioned
* 5.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?
* public
* protected
* No access-specifier
* All of the mentioned
* 6.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?
* public
* protected
* private
* No access-specifier
* 7.Which of the following is the correct way of importing an entire package ‘pkg’?
* import pkg.
* Import pkg.
* import pkg.\*
* Import pkg.\*
* 8.Which of the following is an incorrect statement about packages?
* Package defines a namespace in which classes are stored
* A package can contain another package within it
* Java uses file system directories to store packages
* A package can be renamed without renaming the directory in which the classes are stored
* 9.Which of the following package stores all the standard java classes?
* lang
* java
* util
* java.packages
* 10.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;

* 0
* 1
* 2
* 0 1 2
* 11.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);

}

}

* xello
* xxxxx
* Hxllo
* Hexlo
* 12.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.

* Hello Good World
* HellGoodoWorld
* Compilation error
* Runtime error
* 13.String in Java is a?
* class
* object
* variable
* character array
* 14.Which of these methods of String class is used to obtain character at specified index?
* char(i)
* Charat(i)
* charat(i)
* charAt(i)
* 15.Which of these keywords is used to refer to member of base class from a subclass?
* upper
* super
* this
* none of the mentioned
* 16.Which of these method of String class can be used to test to strings for equality?
* isequal()
* isequals()
* equal()
* equals()
* 17.Which of the following statements are incorrect?
* String is a class
* Strings in java are mutable
* Every string is an object of class String
* Java defines a peer class of String, called StringBuffer, which allows string to be altered
* 18.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);

}

}

* I
* like
* Java
* IlikeJava
* 19.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));

}

}

* I
* L
* K
* E
* 20.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());

}

}

* 9
* 10
* 11
* 12
* 21.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);

}

}

* hello hello
* world world
* hello world
* world hello
* 22.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));

}

}

* false false
* true true
* true false
* false true
* 23.Which of this class is used to create an object whose character sequence is mutable?
* String()
* StringBuffer()
* String() & StringBuffer()
* None of the mentioned
* 24.Which of this method of class StringBuffer is used to concatenate the string representation to the end of invoking string?
* concat()
* append()
* join()
* concatenate()
* 25.Which of these method of class StringBuffer is used to find the length of current character sequence?
* length()
* Length()
* capacity()
* Capacity()
* 26.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

* 27.Which of the following statement is correct?
* reverse() method reverses all characters
* reverseall() method reverses all characters
* replace() method replaces first occurrence of a character in invoking string with another character
* replace() method replaces last occurrence of a character in invoking string with another character
* 28.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'));

}

}

* 6 4 6 9
* 5 4 5 9
* 7 8 8 9
* 1 14 8 15
* 29.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);

}

}

* He
* Hel
* lo
* llo
* 30.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);

}

}

* Hello
* World
* Helloworld
* Hello World
* 31.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++;

}

}

}

* a is a lower case Letter

is White space character

* b is a lower case Letter

is White space character

* 1 is a digit

a is a lower case Letter

* a is a lower case Letter

0 is a digit

* 32.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);

}

}

* Hello
* Hellow
* Throws an exception
* None of these
* 33.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);

}

}

* true
* false
* 1
* Displays error message
* 34.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);

}

}

* false true
* false false
* true false
* true true
* 35.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));

}

}

* true
* false
* 0
* Throws Exception
* 36.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);

}

}

* Throws an exception as string and int are not compatible for addition
* hellow9
* 9hellow
* Compilation error
* 37.The toString() method is defined in which class?
* java.lang.String
* java.lang.Object
* java.lang.util
* None of these
* 38.In String class the method compareTo return?
* true
* false
* an int value
* -1
* 39.What will be the output?

String str = "abcde";

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

* abc
* bc
* bcd
* None of these
* 40. 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();

}

}

* Instance block, method, static block, and constructor
* Method, constructor, instance block, and static block
* Static block, method, instance block, and constructor
* Static block, instance block, constructor, and method