S.NO	PRACTICALS	PAGE NO
1	Write a java programs to perform, Use classes and methods performs (+,-,*,/,%). On instance variable dynamically accepted from user at runtime (Use Scanner Class to accept variable values).	1
2	Write a java program create class Person, use methods accept() [For accepting details] & display() [For displaying details]. Use main as starting point and call both the method. Accept following details: Name, Gender, Address, Contact no.	4
3	Write a java program to calculate average of numbers passed as an argument. User is free to pass any or zero number of arguments. (Note: Overloading not allowed/ Use varargs.) [CO1]	6
4	Create a class, make instance variable and local variable with same name. print value of both.  [CO1]	8
5	Use code written in Q26. Display data of 3 different person. [Use Reference datatype array] [CO1]	9
6	Write a java program to convert primitive data type variable into equivalent wrapper class and vice versa. [CO1]	12
7	Create a class called MyString: Declare two string type variables: str1 ("Welcome to Java tutorial") and str2("Todays topic is String Handling in Java"). Perform following operations in this class: [CO1]  a. Concatenate two strings b. Covert str1 into lower case c. Covert str2 into upper case d. Are both equal to each other	14

	e. Show the location of "J" in both str1 and str2	
	f. Replace "i" with "I" in both the strings	
	g. display "java" from str string	
	h. Display the 7th character in str1.	
	<ol> <li>i. Convert str1 into string array</li> </ol>	
8	Write a java program to convert Celsius into Fahrenheit. [Note: Accept value from user]?	16
9	Print the Maximum, minimum and average from array?	17
10	Print only either Odd or Even s from array? [CO1]	18
11	Redo Q15 and Q20 with help of variable length multidimensional (Uneven/Irregular) Arrays. [CO1]	19
12	Write a java program to print alphabets [small case & upper case] on screen [using for loop]? [CO1]	21
13	Write a java program to create output like:  [CO1]  *  **  **  ***  ***  ****  *****  ****	22
14	Write a java program to display grade of students depends on marks. 100-80 [A],79-60[B],59-40[C], <40 [F]? [CO1]	23
15	Write a java program to check input no is part of Fibonacci series or not? [CO1]	24
16	Write a java program to Print Fibonacci series till that point. [CO1]	25

17	Write java program to calculate factorial of accepted number? [CO1]	26
18	Write a java program to print following output: [CO1]  *  ***  ***  ****  ****  ***  ***	27
19	Write java program to accept 10 integer values from user, store them in array, arrange the array in ascending and descending order. [CO1]	28
20	Create a class HumanBeing(Name, Address, accept(), display()). Use inheritance and derive two classes student (Data Member: Rollno, percentage, graduation stream, Method: Accept() and Display()) and WorkingProfessionals ((Data Member:Department, Designation Member Method: Accept() and Display()).display complete details of one student and one employee. NOTE: use super keyword to invoke hidden members of base class. [CO1]	29
21	Try to apply overriding rules in Q31[CO1]	32
22	Use code written in Q31, make HumanBeing Class immutable and note down the output. [CO1]	35
23	Use code written in Q31, accept() method as final and note down the output. [CO1]	38
24	Write a java program, implement multiple inheritance create two interfaces (IP and Forgein_Collaborations)[add required fields	41

and methods in it] Implement both the interfaces in Student class. Implement only Foreign_Collaborations in WorkingProfessionals. [CO1]  25 Handle ArrayIndexOutOfBoundsException in Q21-Q23. [CO2]  26 Handle ArithematicException in q25, where it is required. [CO2]  27 In extension of Q9 of this file, please raise a user defined checked Exception, if percentage is less than 0 or more than 100. [CO2]  28 Please convert checked exception of q40 into unchecked exception. [CO2]  29 In extension to Q31, Accept one more detail from student, "EmailID". Raise an exception if email Id entered by user does not contain '@' character. Handle the exception in an appropriate manner. [CO2]
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20 White a joys and a serie to all and a series 1 a
30 Write a java program to check entered number 55
is "even" or "odd" display message accordingly
? [CO1]
31 Write a java program to check if number is 56
"palindrome" or not. [CO1]
32 Write java program to print table from 0 to 57
accepted number, using loops and keyboard
inputs. [CO1]
33 Create a variable of StringBuffer class and 58
initialise it with "Hello Jims Students", perform
following operation on it: [CO1]
a. Check its capacity
b. Extend its capacity to 100.
c. Get character at 10 location and set
it to its uppercase version.
d. Get characters from 10 to 20th
location.

	f. Insert "BCA IV" before jims	
	g. Replace "jims" with "JIMS"	
	h. Extract students from the string	
	i. Delete "hello"	
34	Write a Java program to print welcome message	60
	on the screen? [CO1]	
35	Write a Java program to create multiple classes	61
	in a single java file and execute each class	
	independently from JVM? [CO1]	
36	Use code written in Q 2, try to prefix public	62
	with both the classes and execute it note down	
	the output? [CO1]	
37	Write a Java program to overload the main(),	63
	note down the signature of main method, from	
	where program execution started. [CO1]	
38	Use code written in Q4, try to invoke	64
	overloaded main(), in the main method, from	
	where program execution started? [CO1]	
39	Use code written in Ques 2, try to explicitly	65
	invoke the main of second class from 1st class	
	main()? Execute first Class through main	
40	method[CO1]	
40	Write a Java program to pass command line	66
11	argument and display it on the screen? [CO1] Write a java program, declare and use constant	67
41	in java code? [CO1]	67
42	Write a java program, accept following details	۵0
42	from student: First name, last name,	68
	qualification, percentage, total marks.	
43	Write a java program extract details of main	69
43	thread, change name and priority of main	UĐ
	thread.	
11	Write a java program to create multiple (2	70
44		70
	threads) main thread will print AZ and child	
	thread will print 150 [Use thread class]	

45	Write a java program to create multiple (2 threads) main thread will print table of 2 and child thread will print AZ [Use Runnable Interface]	71
46	Write a java program read data (byte and character).	72
47	Write a java program read and write data (byte and character) in a file	73