

Question No.	Question	Done or Not Done (Java)
Number Operations		
1	Positive or Negative number	✓
2	Even or Odd number	✓
3	Sum of First N Natural numbers	✓
4	Sum of N natural numbers	✓
5	Sum of numbers in a given range	✓
6	Greatest of two numbers	✓
7	Greatest of the Three numbers	✓
8	Leap year or not	✓
9	Prime number	✓
10	Prime number within a given range	✓
11	Sum of digits of a number	✓
12	Reverse of a number	✓
13	Palindrome number	✓
14	Armstrong number	✓
15	Armstrong number in a given range	✓
16	Fibonacci Series upto nth term	✓
17	Find the Nth Term of the Fibonacci Series	✓
18	Factorial of a number	✓
19	Power of a number	✓
20	Factor of a number	✓
21	Finding Prime Factors of a number	✓
22	Strong number	✓
23	Perfect number	✓
24	Perfect Square	✓
25	Automorphic number	✓
26	Harshad number	✓
27	Abundant number	✓
28	Friendly pair	✓
Working with Numbers		
29	Highest Common Factor (HCF)	
30	Lowest Common Multiple (LCM)	
31	Greatest Common Divisor	
32	Binary to Decimal to conversion	
33	Octal to Decimal conversion	
34	Hexadecimal to Decimal conversion	
35	Decimal to Binary conversion	
36	Decimal to Octal Conversion	
37	Decimal to Hexadecimal Conversion	
38	Binary to Octal conversion	
39	Octal to Binary conversion	
40	Quadrants in which a given coordinate lies	
41	Permutations in which n people can occupy r seats in a classroom	
42	Maximum number of handshakes	

43	Addition of two fractions	
44	Replace all 0's with 1 in a given integer	
45	Can a number be expressed as a sum of two prime numbers	
46	Count possible decoding of a given digit sequence	
47	Calculate the area of a circle	
48	Find the prime numbers between 1 to 100	
49	Calculate the number of digits in an integer	
50	Convert digit/number to words	
51	Counting number of days in a given month of a year	
52	Finding Number of times x digit occurs in a given input	
53	Finding number of integers which has exactly x divisors	
54	Finding Roots of a quadratic equation	
Codes for Recursion		
55	Power of a Number	
56	Prime Number	
57	Largest element in an array	
58	Smallest element in an array	
59	Reversing a Number	
60	HCF of two numbers using Recursion	
61	LCM of two numbers	
62	Program to calculate length of the string using recursion	
63	Print All Permutations of a String	
64	Given an integer N the task is to print the F(N)th term.	
65	Given a list arr of N integers, print sums of all subsets in it	
66	Last non-zero digit in factorial	
67	Given a positive integer N, return the Nth row of pascal's triangle	
68	Given an integer N representing the number of pairs of parentheses, the task is to generate all combinations of well-formed(balanced) parentheses	
69	Find the Factorial of a number using recursion	
70	Find all possible Palindromic partitions of the given String	
71	Find all the N bit binary numbers having more than or equal 1's than 0's	
72	Given a set of positive integers, find all its subsets	
73	Given a string s, remove all its adjacent duplicate characters recursively	
Important Codes related to Arrays		
74	Find Largest element in an array	
75	Find Smallest Element in an Array	
76	Find the Smallest and largest element in an array	
77	Find Second Smallest Element in an Array	
78	Calculate the sum of elements in an array	

79	Reverse an Array	
80	Sort first half in ascending order and second half in descending	
81	Sort the elements of an array	
82	Finding the frequency of elements in an array	
83	Sorting elements of an array by frequency	
84	Finding the Longest Palindrome in an Array	
85	Counting Distinct Elements in an Array	
86	Finding Repeating elements in an Array	
87	Finding Non Repeating elements in an Array	
88	Removing Duplicate elements from an array	
89	Finding Minimum scalar product of two vectors	
90	Finding Maximum scalar product of two vectors in an array	
91	Counting the number of even and odd elements in an array	
92	Find all Symmetric pairs in an array	
93	Find maximum product sub-array in a given array	
94	Finding Arrays are disjoint or not	
95	Determine Array is a subset of another array or not	
96	Determine can all numbers of an array be made equal	
97	Finding Minimum sum of absolute difference of given array	
98	Sort an array according to the order defined by another array	
99	Replace each element of the array by its rank in the array	
100	Finding equilibrium index of an array	
101	Rotation of elements of array- left and right	
102	Block swap algorithm for array rotation	
103	Juggling algorithm for array rotation	
104	Finding Circular rotation of an array by K positions	
105	Balanced Parenthesis Problem	
Operations on Strings		
106	Check whether a character is a vowel or consonant	
107	Check whether a character is a alphabet or not	
108	Find the ASCII value of a character	
109	Length of the string without using strlen() function	
110	Toggle each character in a string	
111	Count the number of vowels	
112	Remove the vowels from a String	
113	Check if the given string is Palindrome or not	
114	Print the given string in reverse order	
115	Remove all characters from string except alphabets	
116	Remove spaces from a string	
117	Remove brackets from an algebraic expression	
118	Count the sum of numbers in a string	
119	Capitalize the first and last character of each word of a string	

120	Calculate frequency of characters in a string	
121	Find non-repeating characters in a string	
122	Check if two strings are Anagram or not	
123	Replace a sub-string in a string	
124	Replacing a particular word with another word in a string	
125	Count common sub-sequence in two strings	
126	Check if two strings match where one string contains wildcard characters	
127	Print all permutations of a given string in lexicographically sorted order	
Advanced Codes related to Arrays		
128	Given an array which consists of only 0, 1 and 2. Sort the array without using any algorithm	
129	Find the "Kth" max and min element of an array	
130	Move all the negative elements to one side of the array	
131	Find the Union and Intersection of the two sorted arrays.	
132	Find Largest sum contiguous Subarray	
133	Minimize the maximum difference between heights	
134	Minimum no. of Jumps to reach the end of an array	
135	Find duplicate in an array of N+1 Integers	
136	Merge 2 sorted arrays without using extra space.	
137	Kadane's Algorithm	
138	Merge Intervals	
139	Count Inversion	
140	Best time to buy and Sell stock	
141	Find all pairs on integer array whose sum is equal to given number	
142	Find if there is any subarray with sum equal to 0	
143	Find factorial of a Large Number	
144	Find common elements In 3 sorted arrays	
145	Rearrange the array in alternating positive and negative items with O(1) extra space	
146	Given an array of size n and a number k, find all elements that appear more than " n/k " times.	
147	Maximum profit by buying and selling a share atmost twice	
148	Next Permutation	
149	Find longest consecutive subsequence	
150	Trapping Rain water problem	
151	Chocolate Distribution problem	
152	Smallest Subarray with sum greater than a given value	
153	Three way partitioning of an array around a given value	
154	Minimum no. of operations required to make an array palindrome	

155	Median of 2 sorted arrays of equal size	
156	Median of 2 sorted arrays of different size	
Codes related to Matrix		
157	Spiral traversal on a Matrix	
158	Search an element in a matrix	
159	Find median in a row wise sorted matrix	
160	Find row with maximum no. of 1's	
161	Print elements in sorted order using row-column wise sorted matrix	
162	Find a specific pair in matrix	
163	Rotate matrix by 90 degrees	
164	Kth smallest element in a row-column wise sorted matrix	
165	Common elements in all rows of a given matrix	
Pattern Printing		
166	Square Star Pattern	
167	Hollow Square Star Pattern	
168	Rhombus Star Pattern	
169	Rectangle Star Pattern	
170	Hollow Rectangle Star Pattern	
171	Parallelogram Star Pattern	
172	Mirrored Rhombus Star Pattern	
173	Triangle Star Pattern	
174	Pyramid Star Pattern	
175	Hollow Pyramid Star Pattern	
176	Inverted Pyramid Star Pattern	
177	Inverted Hollow Pyramid Star Pattern	
178	Half Diamond Star Pattern	
179	Half Diamond Star Pattern Inverted	
180	Diamond Star Pattern	
Number Pattern Printing Programs		
181	Basic Square 1 Pattern	
182	Basic Square incrementing Pattern	
183	Internal varsity square Pattern	
184	Basic Right Triangle Number Pattern	
185	Basic Right Triangle Number Pattern (Inverted)	
186	Basic incrementing Triangle Pattern initialised = 3	
187	Basic incrementing Triangle Pattern(Inverted) initialised = 3	
188	Basic double incrementing Triangle Pattern initialised = 3	
189	Basic incrementing Diamond Pattern(Inverted) initialised = 3	
190	Basic double incrementing Triangle Pattern initialised = 3	
191	Basic incrementing Triangle Pattern(Inverted) initialised Mirrored = 3	

192	Basic incrementing Diamond Pattern(Inverted Sandwich) initialised = 3	
193	Basic double incrementing Triangle Pattern initialised Sandwich= 3	
194	Basic incrementing Triangle Pattern(Inverted) initialised Mirrored Sandwich = 3	
Number Star Mix Pattern		
195	Basic incrementing Squared Number-Star Pattern	
196	Basic incrementing inverted Squared Number-Star Pattern	
197	Basic incrementing Squared Number-Star Pattern + Basic incrementing inverted Squared Number-Star Pattern (alternate)	
198	Basic incrementing Squared Number-Star Pattern + Basic incrementing inverted Squared Number-Star Pattern (alternate) Type 2	
199	Basic incrementing Squared Number-Star Pattern + Basic incrementing inverted Squared Number-Star Pattern (alternate) Type 3	
200	Basic incrementing Squared Number-Star Pattern Mirrored + Basic incrementing inverted Squared Number-Star Pattern Mirrored (alternate)	
201	Basic incrementing Triangle Pattern	
202	Basic incrementing Triangle Pattern (inverted)	
203	Basic incrementing Triangle Pattern + Inverted (Mix)	
204	Basic incrementing mirrored Triangle Pattern	
205	Basic incrementing inverted mirrored Triangle Pattern	
206	Basic incrementing Triangle Pattern + Inverted (Mix)	
207	Basic Diamond Number Star Pattern	
208	Basic Diamond Number Star Pattern (Sandwich)	
209	Basic Diamond Number Star Pattern (Sandwich Inverted)	
210	Basic Diamond Number Star Pattern initialised	
211	Basic Diamond Number Star Pattern (Sandwich)	
212	Basic Diamond Number Star Pattern (Sandwich Inverted)	
Few more pattern programs		
213	Program for Pyramid star pattern	
214	Program for Pyramid number pattern	
215	Program for Palindromic Pyramid Pattern	
216	Program for Diamond star pattern	
217	Program for Diamond number pattern	
218	Program for Floyd's Triangle	
219	Program for Pascal triangle	
220	Program to Check array similarity	
221	Program for Square sum	
222	Program for Longest palindrome in the array	