Java Basic Programs

1) Fibonacci Series in Java
2) Prime Number Program in Java
3) Palindrome Program in Java
4) Factorial Program in Java
5) Armstrong Number in Java
6) How to Generate Random Number in Java
7) How to Print Pattern in Java
8) How to Compare Two Objects in Java
9) How to Create Object in Java
10) How to Print ASCII Value in Java

Java Number Programs

1) How to Reverse a Number in Java
2) Java Program to convert Number to Word
3) Automorphic Number Program in Java
4) Peterson Number in Java
5) Sunny Number in Java
6) Tech Number in Java
7) Fascinating Number in Java
8) Keith Number in Java
9) Neon Number in Java
10) Spy Number in Java
11) ATM program Java
12) Autobiographical Number in Java
13) Emirp Number in Java
14) Sphenic Number in Java
15) Buzz Number Java
16) Duck Number Java
17) Evil Number Java
18) ISBN Number Java
19) Krishnamurthy Number Java
20) Bouncy Number in Java
21) Mystery Number in Java
22) Smith Number in Java
23) Strontio Number in Java
24) Xylem and Phloem Number in Java
25) nth Prime Number Java
26) Java Program to Display Alternate Prime Numbers
27) Java Program to Find Square Root of a Number Without sqrt Method
28) Java Program to Swap Two Numbers Using Bitwise Operator
29) Java Program to Find GCD of Two Numbers
30) Java Program to Find Largest of Three Numbers
31) Java Program to Find Smallest of Three Numbers Using Ternary Operator
32) Java Program to Check if a Number is Positive or Negative
33) Java Program to Check if a Given Number is Perfect Square
34) Java Program to Display Even Numbers From 1 to 100
35) Java Program to Display Odd Numbers From 1 to 100
36) Java Program to Find Sum of Natural Numbers

Java Array Programs

1) Java Program to copy all elements of one array into another array
2) Java Program to find the frequency of each element in the array
3) Java Program to left rotate the elements of an array
4) Java Program to print the duplicate elements of an array
5) Java Program to print the elements of an array
6) Java Program to print the elements of an array in reverse order
7) Java Program to print the elements of an array present on even position
8) Java Program to print the elements of an array present on odd position
9) Java Program to print the largest element in an array
10) Java Program to print the smallest element in an array
11) Java Program to print the number of elements present in an array
12) Java Program to print the sum of all the items of the array
13) Java Program to right rotate the elements of an array
14) Java Program to sort the elements of an array in ascending order
15) Java Program to sort the elements of an array in descending order
16) Java Program to Find 3rd Largest Number in an array
17) Java Program to Find 2nd Largest Number in an array
18) Java Program to Find Largest Number in an array
19) Java to Program Find 2nd Smallest Number in an array
20) Java Program to Find Smallest Number in an array
21) Java Program to Remove Duplicate Element in an array
22) Java Program to Print Odd and Even Numbers from an array
23) How to Sort an Array in Java

Java Matrix Programs

1) Java Matrix Programs
2) Java Program to Add Two Matrices
3) Java Program to Multiply Two Matrices
4) Java Program to subtract the two matrices
5) Java Program to determine whether two matrices are equal
6) Java Program to display the lower triangular matrix
7) Java Program to display the upper triangular matrix
8) Java Program to find the frequency of odd & even numbers in the given matrix
9) Java Program to find the product of two matrices
10) Java Program to find the sum of each row and each column of a matrix
11) Java Program to find the transpose of a given matrix
12) Java Program to determine whether a given matrix is an identity matrix
13) Java Program to determine whether a given matrix is a sparse matrix
14) Java Program to Transpose matrix

Java String Programs

1) Java Program to count the total number of characters in a string
2) Java Program to count the total number of characters in a string 2
3) Java Program to count the total number of punctuation characters exists in a String
4) Java Program to count the total number of vowels and consonants in a string
5) Java Program to determine whether two strings are the anagram
6) Java Program to divide a string in 'N' equal parts.
7) Java Program to find all subsets of a string
8) Java Program to find the longest repeating sequence in a string

9) Java Program to find all the permutations of a string
10) Java Program to remove all the white spaces from a string
11) Java Program to replace lower-case characters with upper-case and vice-versa
12) Java Program to replace the spaces of a string with a specific character
13) Java Program to determine whether a given string is palindrome
14) Java Program to determine whether one string is a rotation of another
15) Java Program to find maximum and minimum occurring character in a string
16) Java Program to find Reverse of the string
17) Java program to find the duplicate characters in a string
18) Java program to find the duplicate words in a string
19) Java Program to find the frequency of characters
20) Java Program to find the largest and smallest word in a string
21) Java Program to find the most repeated word in a text file
22) Java Program to find the number of the words in the given text file
23) Java Program to separate the Individual Characters from a String
24) Java Program to swap two string variables without using third or temp variable.
25) Java Program to print smallest and biggest possible palindrome word in a given string
26) Reverse String in Java Word by Word
27) Reserve String without reverse() function

Java Searching and Sorting Programs
1) Linear Search in Java
2) Binary Search in Java
3) Bubble Sort in Java
4) Selection Sort in Java
5) Insertion Sort in Java

Java Conversion Programs
1) How to convert String to int in Java
2) How to convert int to String in Java
3) How to convert String to long in Java
4) How to convert long to String in Java
5) How to convert String to float in Java
6) How to convert float to String in Java
7) How to convert String to double in Java
8) How to convert double to String in Java
9) How to convert String to Date in Java
10) How to convert Date to String in Java
11) How to convert String to char in Java
12) How to convert char to String in Java
13) How to convert String to Object in Java
14) How to convert Object to String in Java
15) How to convert int to long in Java
16) How to convert long to int in Java
17) How to convert int to double in Java
18) How to convert double to int in Java
19) How to convert char to int in Java
20) How to convert int to char in Java
21) How to convert String to boolean in Java
22) How to convert boolean to String in Java

23) How to convert Date to Timestamp in Java
24) How to convert Timestamp to Date in Java
25) How to convert Binary to Decimal in Java
26) How to convert Decimal to Binary in Java
27) How to convert Hex to Decimal in Java
28) How to convert Decimal to Hex in Java
29) How to convert Octal to Decimal in Java
30) How to convert Decimal to Octal in Java

Java Pattern programs

1) Java program to print the following spiral pattern on the console

```
1    2    3    4    5    6    7    8    9    10
36   37   38   39   40   41   42   43   44   11
35   64   65   66   67   68   69   70   45   12
34   63   84   85   86   87   88   71   46   13
33   62   83   96   97   98   89   72   47   14
32   61   82   95   100  99   90   73   48   15
31   60   81   94   93   92   91   74   49   16
30   59   80   79   78   77   76   75   50   17
29   58   57   56   55   54   53   52   51   18
28   27   26   25   24   23   22   21   20   19
```

2) Java program to print the following pattern

```
5432*
543*1
54*21
5*321
*4321
```

3) Java program to print the following pattern 2

```
*000*000*
0*00*00*0
00*0*0*00
000***000
```

4) Java program to print the following pattern 3

```
1
2 4
3 6 9
4 8 12 16
5 10 15 20 25
6 12 18 24 30 36
7 14 21 28 35 42 49
8 16 24 32 40 48 56 64
9 18 27 36 45 54 63 72 81
10 20 30 40 50 60 70 80 90 100
```

5) Java program to print the following pattern 4

```
1       1
 2    2
  3 3
   4
  3 3
 2    2
1       1
```

6) Java program to print the following pattern 5

```
1   2   3   4   5
16                  6
15                  7
14                  8
13 12 11 10 9
```

7) Java program to print the following pattern on the console

```
12344321
123**321
12****21
1******1
```

8) Java program to print the following pattern on the console 2

```
0
909
89098
7890987
678909876
56789098765
4567890987654
345678909876543
23456789098765432
1234567890987654321
```

9) Java program to print the following pattern on the console 3

```
*

* *

* * *

* * * *

* * * * *

* * * * * *
```

10) Java program to print the following pattern on the console 4

```
A
B B
C C C
D D D D
E E E E E
```

11) Java program to print the following pattern on the console 5

```
1111111111

1           1

1           1

1           1

1           1

1           1

1           1

1           1

1           1

1           1

1111111111
```

12) Java program to print the following pattern on the console 6

```
1 2 3 4 5
1 2 3 4
1 2 3
1 2
1
```

13) Java program to print the following pattern on the console 7

```
*********

 *******

  *****

   ***

    *
```

14) Java program to print the following pattern on the console 8

```
          1

       1   1

     1   2   1

   1   3   3   1

  1  4    6   4   1

 1  5   10   10  5   1
```

15) Java program to print the following pattern on the console 9

```
* * * * *

 * * * *

  * * *

   * *

    *
```

16) Java program to print the following pattern on the console 10

```
1
2 3
4 5 6
7 8 9 10
```

17) Java program to print the following pattern on the console 11

```
1
1 2
1 2 3
1 2 3 4
1 2 3 4 5
```

18) Java program to print the following pattern on the console 12

```
        *

      * * *

    * * * * *

  * * * * * * *

* * * * * * * * *
```

Java Singly Linked List Programs
1) Singly linked list Examples in Java
2) Java Program to create and display a singly linked list
3) Java program to create a singly linked list of n nodes and count the number of nodes
4) Java program to create a singly linked list of n nodes and display it in reverse order
5) Java program to delete a node from the beginning of the singly linked list
6) Java program to delete a node from the middle of the singly linked list
7) Java program to delete a node from the end of the singly linked list
8) Java program to determine whether a singly linked list is the palindrome
9) Java program to find the maximum and minimum value node from a linked list
10) Java Program to insert a new node at the middle of the singly linked list
11) Java program to insert a new node at the beginning of the singly linked list
12) Java program to insert a new node at the end of the singly linked list
13) Java program to remove duplicate elements from a singly linked list
14) Java Program to search an element in a singly linked list

Java Circular Linked List Programs
1) Java program to create and display a Circular Linked List
2) Java program to create a Circular Linked List of N nodes and count the number of nodes
3) Java program to create a Circular Linked List of n nodes and display it in reverse order
4) Java program to delete a node from the beginning of the Circular Linked List
5) Java program to delete a node from the end of the Circular Linked List
6) Java program to delete a node from the middle of the Circular Linked List
7) Java program to find the maximum and minimum value node from a circular linked list
8) Java program to insert a new node at the beginning of the Circular Linked List
9) Java program to insert a new node at the end of the Circular Linked List
10) Java program to insert a new node at the middle of the Circular Linked List
11) Java program to remove duplicate elements from a Circular Linked List
12) Java program to search an element in a Circular Linked List
13) Java program to sort the elements of the Circular Linked List

Java Doubly Linked List Programs
1) Java program to convert a given binary tree to doubly linked list
2) Java program to create a doubly linked list from a ternary tree
3) Java program to create a doubly linked list of n nodes and count the number of nodes
4) Java program to create a doubly linked list of n nodes and display it in reverse order
5) Java program to create and display a doubly linked list
6) Java program to delete a new node from the beginning of the doubly linked list
7) Java program to delete a new node from the end of the doubly linked list
8) Java program to delete a new node from the middle of the doubly linked list
9) Java program to find the maximum and minimum value node from a doubly linked list
10) Java program to insert a new node at the beginning of the Doubly Linked list
10) Java program to insert a new node at the end of the Doubly Linked List
12) Java program to insert a new node at the middle of the Doubly Linked List
13) Java program to remove duplicate elements from a Doubly Linked List
14) Java program to rotate doubly linked list by N nodes
15) Java program to search an element in a doubly linked list
16) Java program to sort the elements of the doubly linked list

Java Tree Programs

1) Java Program to calculate the Difference between the Sum of the Odd Level and the Even Level Nodes of a Binary Tree

2) Java program to construct a Binary Search Tree and perform deletion and In-order traversal

3) Java program to convert Binary Tree to Binary Search Tree

4) Java program to determine whether all leaves are at same level

5) Java program to determine whether two trees are identical

6) Java program to find maximum width of a binary tree

7) Java program to find the largest element in a Binary Tree

8) Java program to find the maximum depth or height of a tree

9) Java program to find the nodes which are at the maximum distance in a Binary Tree

10) Java program to find the smallest element in a tree

11) Java program to find the sum of all the nodes of a binary tree

12) Java program to find the total number of possible Binary Search Trees with N keys

13) Java program to implement Binary Tree using the Linked List

14) Java program to search a node in a Binary Tree