

- **W.A.J.P to Take three numbers from the user and print the greatest number.**

```
import java.util.Scanner;

public class Greatest {

    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);

        System.out.print("Input the 1st number: ");
        int no1 = sc.nextInt();

        System.out.print("Input the 2nd number: ");
        int no2 = sc.nextInt();

        System.out.print("Input the 3rd number: ");
        int no3 = sc.nextInt();


        if (no1 > no2)
            if (no1 > no3)
                System.out.println("The greatest: " + no1);

        if (no2 > no1)
            if (no2 > no3)
                System.out.println("The greatest: " + no2);

        if (no3 > no1)
            if (no3 > no2)
                System.out.println("The greatest: " + no3);

    }

}
```

- **W.A.J.P to check given number is Prime or not?**

```
import java.util.Scanner;

public class Prime {

    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);

        int num = 95;
        boolean flag = false;

        for (int i = 2; i <= num / 2; ++i) {
            // condition for nonprime number
            if (num % i == 0) {

                flag = true;
                break;
            }
        }

        if (!flag)

            System.out.println(num + " is a prime number.");

        Else

            System.out.println(num + " is not a prime number.");
    }
}
```

- **W.A.J.P to find factorial for Given Number.**

```
import java.util.Scanner;

public class forloop_6 {

    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);

        int no = 5, i = 1;
        long factorial = 1;
    }
}
```

```

        while(i <= no)
        {
            factorial *= i;
            i++;
        }

        System.out.printf("Factorial of %d = %d", no, factorial);

    }

}

```

• W.A.J.P to check given number is Armstrong or not?

```

import java.util.Scanner;

public class armstorng {

    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);

        int number = 45, originalNumber, remainder, result = 0;

        originalNumber = number;

        while (originalNumber != 0)
        {
            remainder = originalNumber % 10;
            result += Math.Pow(remainder, 3);
            originalNumber /= 10;
        }

        if(result == number)
            System.out.println(number + " is an Armstrong number.");
        else
            System.out.println(number + " is not an Armstrong number.");

    }

}

```

• W.A.J.P in Java to display the first 10 natural numbers using while loop.

```
import java.util.Scanner;

public class naturalNo {

    public static void main(String[] args) {
        Scanner sc = new Scanner("first 10 natural number");

        for(int i = 1; i <= 10; i++)
        {
            System.out.println(i);
        }

    }
}
```

• W.A.J.P for create Fibonacci Series.

```
import java.util.Scanner;

public class fibonacci {

    public static void main(String[] args) {

        Scanner sc = new Scanner("first 10 natural number");

        int n = 10,
            a = 0,
            b = 1;

        System.out.println("Fibonacci Series till: " );

        for (int i = 1; i <= n; ++i) {
            System.out.print(a+ ", ");

            // compute the next term
            int nextTerm = a + b;
            a = b;
            b = nextTerm;
        }
    }
}
```

• **W.A.J.P to Print pattern Given Below.**

1. 1
 12
 123
 1234
 12345

```
import java.util.Scanner;

public class fibonacci {

    public static void main(String[] args) {

        Scanner sc = new Scanner(System.in);
        System.out.print("Enter value : ");
        int a = sc.nextInt();

        for(int i=1; i<=a; i++)
        {
            for(int j=1; j<=i; j++)
            {
                System.out.print(j);
            }
            System.out.println();
        }
    }
}
```

2. 1
 01
 101
 01010
 101010

3.

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

```
import java.util.Scanner;

public class forloop_6 {

    public static void main(String[] args) {
        Scanner sc = new Scanner("enter value: ");

        int number = 3;
        int m = 1;
        int n;
        while (m <= number) {
            n = 1;
            while (n++ <= number - m) {
                System.out.print(" ");
            }
            n = 1;
            while (n++ <= m * 2 - 1) {
                System.out.print("*");
            }
            System.out.println();
            m++;
        }
        m = number - 1;
        while (m > 0) {
            n = 1;
            while (n++ <= number - m) {
                System.out.print(" ");
            }
            n = 1;
            while (n++ <= m * 2 - 1) {
                System.out.print("*");
            }
            System.out.println();
            m--;
        }
    }
}
```

- WAP to compute the sum of the first 100 prime numbers.

```
import java.util.Scanner;

public class primeNo{

    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);

        int i, number, count, sum = 0;

        for(number = 1; number <= 100; number++)
        {
            count = 0;
            for (i = 2; i <= number/2; i++)
            {
                if(number % i == 0)
                {
                    count++;
                    break;
                }
            }
            if(count == 0 && number != 1)
            {
                sum = sum + number;
            }
        }

        System.out.println(" Prime Numbers = " + sum);
    }
}
```

- WAP to sum values of an array.

```
import java.util.Scanner;

public class arrey {

    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);

        int [] arr = new int [] {1,2,3};
        int sum = 0;

        for (int i = 0; i < arr.length; i++) {
            sum = sum + arr[i];
        }

        System.out.println(" the elements of an array: " + sum);

    }

}
```

- WAP to calculate the average value of array elements

```
import java.util.Scanner;

public class avetagevalue_array {

    public static void main(String[] args) {
        Scanner s = new Scanner(System.in);

        // reading the array size.
        Scanner sc = new Scanner(System.in);

        System.out.println("Enter array size: ");
        int a = s.nextInt();
        // create an array
        int[] array = new int[a];

        // reading values from user keyboard
        System.out.println("Enter array values : ");
        for (int i = 0; i < a; i++) {
```



```

        int value = s.nextInt();
        array[i] = value;
    }

    // getting array length
    int length = array.length;

    // default sum value.
    int sum = 0;

    // sum of all values in array using for loop
    for (int i = 0; i < array.length; i++) {
        sum += array[i];
    }

    double average = sum / length;

    System.out.println("Average of array : " + average);

    }

}

```

• WAP to find the index of an array element.

```

import java.util.Arrays;

public class index_array {
    public static int findIndex(int[] array, int t) {

        if (my_array == null)
            return -1;

        // Get the length of the array.
        int a = array.length;
        int i = 0;

        // Iterate through the elements in the array.
        while (i < a)

            // Check if the current element is equal to 't' and return its index
            // if found.
            if (array[i] == t)
                return i;

            else
                i = i + 1;
    }
}

```

```

    }

    // If 't' is not found in the array, return -1.
    return -1;
}

public static void main(String[] args) {

    int[] my_array = {25, 14, 56, 15, 36, 56, 77, 18, 29, 49};

    // Find and print the index position of value 25 in the array.

    System.out.println("Index position of 25 is:" + findIndex(array,
        25));
}

```

• WAP to find the maximum and minimum value of an array.

```

import java.util.Arrays;

public class valueof_array {

    public static void main(String[] args) {

        int[] array = {5, 12, 9, 18, 3, 21};

        int max = array[0];
        int min = array[0];

        for (int i = 1; i < array.length; i++) {
            if (array[i] > max)
            {
                max = array[i];
            }

            if (array[i] < min)
            {
                min = array[i];
            }
        }
    }
}

```

- **WAP to Compare Two String.**

```
import java.util.Scanner;

public class compare_String {

    public static void main(String[] args) {

        String style = "fenal";
        String style2 = "fenal";

        if(style == style2)
        {
            System.out.println("Equal");
        }

        else
        {
            System.out.println("Not Equal");
        }

    }

}
```

- **WAP to concatenate a given string to the end of another string.**

```
import java.util.Scanner;

public class concatenate_string {

    public static void main(String[] args) {

        String str1 = "789 and ";
        String str2 = "897";

        {
            System.out.println("String 1: " + str1);
        }

        {
            System.out.println("String 2: " + str2);
        }

    }

}
```

```

        String str3 = str1.concat(str2);
    {
        System.out.println("The concatenated string: " + str3);
    }
}
}

```

• WAP to demonstrate try catch block.

```

import java.util.Scanner;

public class demonstrate {

    public static void main(String[] args) {

        int[] No = {1, 2, 3};
        {
            System.out.println(No [5]);
        }
    }
}

```

• WAP to Copy one array into another

```

import java.util.Scanner;

public class test {

    public static void main(String[] args) {
        int a[] = { 1, 8, 3 };

        // Create an array b[] of same size as a[]
        int b[] = new int[a.length];
    }
}

```

```

        { b=a;}

        System.out.println("Contents of a[] ");
        for (int i = 0; i < a.length; i++)
            System.out.print(a[i] + " ");

        System.out.println("\nContents of b[] ");
        for (int i = 0; i < b.length; i++)
            System.out.print(b[i] + " ");
    }
}

```

- **WAP to reverse an array of integer values.**

```

package array;

public class ReverseArray {

    public static void main(String[] args) {

        int [] arr = new int [] {1, 2, 3, 4, 5};
        System.out.println("Original array: ");
        for (int i = 0; i < arr.length; i++) {
            System.out.print(arr[i] + " ");
        }
        System.out.println();
        System.out.println("Array in reverse : ");

        for (int i = arr.length-1; i >= 0; i--)
        {
            System.out.print(arr[i] + " ");
        }

    }

}

```

- **WAP to find the second largest element in an array.**

```

public class Tester {
    public static int getSecondLargest(int[] a) {
        int temp;

        for (int i = 0; i < a.length; i++) {
            for (int j = i + 1; j < a.length; j++) {

```

```

        if (a[i] > a[j]) {
            temp = a[i];
            a[i] = a[j];
            a[j] = temp;
        }
    }

    return a[a.length - 2];
}

public static void main(String args[]) {
    int a[] = { 11,10,4, 15, 16, 13, 2 };
    System.out.println("Second Largest: " +getSecondLargest(a));
}
}

```

- W.A.J.P. which will ask the user to enter his/her marks (out of 100). Define a method that will display grades according to the marks entered as below:
 Marks Grade
 91-100 AA
 81-90 AB
 71-80 BB
 61-70 BC
 51-60 CD
 41-50 DD
 <=40 Fail

```
package statement;
```

```
import java.util.Scanner;
```

```

public class S003_grade {
    public static void main(String[] args) {

        int marks = 0;
        do
        {
            Scanner sc = new Scanner(System.in);
            System.out.println("Enter Marks : ");
            marks= sc.nextInt();

            if(marks>91 && marks<=100)
            {
                System.out.println("Grade AA");
            }
        }
    }
}

```

```

        else if(marks>81 && marks<=90)
        {
            System.out.println("Grade BB");
        }
        else if(marks>61 && marks<=70)
        {
            System.out.println("Grade BC");
        }
        else if(marks>51 && marks<=60)
        {
            System.out.println("Grade CD");
        }
        else if(marks>41 && marks<=50)
        {
            System.out.println("Grade DD");
        }
        else if(marks<=40)
        {
            System.out.println("Grade FAIL");
        }
        else
        {
            System.out.println("Invalid input");
        }
    }while(marks!=0);
}
}

```

- W.A.J.P. to create a custom exception if Customer withdraw amount

which is greater than account balance then program will show custom

exception otherwise amount will deduct from account balance.

Account balance is:2000 Enter withdraw

amount:2500

Sorry, insufficient balance, you need more 500 Rs.To perform
this transaction.

```
package exception;
```

```
class Insufficeintamount extends Exception
```

```

{
}
class bank
{
    double balance;

    public void balance()
    {
        System.out.println("current balance is :"+ balance);
    }

    public void deposit(double amt)
    {
        balance = balance+amt;
    }

    public void withdraw(double amt) throws Insufficeintamount
    {
        if(amt>balance)
        {
            throw new Insufficeintamount();
        }
        else
        {
            balance = balance-amt;
        }
    }
}

```

```

public class E03_CustomerException {

    public static void main(String[] args) {

        bank b = new bank();
        b.balance();
        b.deposit(2000);

        b.balance();

        try {
            b.withdraw(2500);
        } catch (Insufficeintamount e) {

```



```
        // TODO Auto-generated catch block
        e.printStackTrace();
    }

    b.balance();

}

}
```