1. **Calculate the Odd-Even number by given input during runtime.**

```
package com.coderbd.questions;
import java.util.Scanner;
public class OddEven {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        isOddEven(sc.nextInt());
    }
    static void isOddEven(int num) {
        if (num == 0) {
            System.out.println(num + " is ZERO");
        } else {
            if (num % 2 == 0) {
                System.out.println(num + " is Even Number");
            } else {
                System.out.println(num + " is ODD Number");
            }
        }
    }
}
```

2. **Calculate the largest number among the three numbers.**

```
package com.coderbd.questions;
import java.util.Scanner;
public class LargestNumbers {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        isLargestNumber(sc.nextInt(), sc.nextInt(), sc.nextInt());
    }
    static void isLargestNumber(int n1, int n2, int n3) {
        if (n1 > n2 && n1 > n3) {
            System.out.println(n1 + " is Largest Number");
        } else if (n2 > n1 && n2 > n3) {
            System.out.println(n2 + " is Largest Number");
        } else if (n3 > n1 && n3 > n2) {
            System.out.println(n3 + " is Largest Number");
        } else {
            System.out.println(n1 + ", " + n2 + ", " + n3 + " are all equal Numbers");
        }
    }
}
```

3. **Giving input in runtime and checked weather it is prime or not.**

```
package com.coderbd.questions;
import java.math.BigInteger;
import java.util.Scanner;
public class PrimeWithScanner {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        isPrime(sc.nextInt());
    }
    static void isPrime(int number) {
        if (BigInteger.valueOf(number).isProbablePrime(1)) {
            System.out.print(number + " is Prime ");
        } else {
            System.out.print(number + " is Not Prime ");
        }
```

```
    }
}
```

4. Calculate factorial value of a number.

```
package com.coderbd.questions;
import java.math.BigInteger;
import java.util.Scanner;
public class FactorialWithScanner {
    public static void main(String[] args) {
         Scanner sc = new Scanner(System.in);
         getFactorials(sc.nextInt());
    }
     static void getFactorials(int n) {
        BigInteger f = BigInteger.valueOf(1);
        for (int i = 1; i <= n; i++) {
            f = f.multiply(BigInteger.valueOf(i));// f= f * i
        }
        System.out.println(f);
    }
}
```

5. Calculate an Array Which has five value and display its value and finally display it's total.

```
package com.coderbd.questions;

public class ArrayDisplayAndSum {

    public static void main(String[] args) {
        int[] arr = {4, 2, 1, 8, 9};
        int sum = 0;
        for (int i : arr) {
            sum += i;
            System.out.print(i + " ");
        }
        System.out.println("Sum: " + sum);
    }

}
```

6. Create a two Dimension Array and display its value and finally display it's total.

```
package com.coderbd.questions;
public class TwoDimentionalArraySum {
    public static void main(String[] args) {
        int[][] twoD = {
            {2, 8, 6},
            {1, 5, 9}
        };
        int sum = 0;
        for (int[] oneD : twoD) {
            for (int i : oneD) {
                System.out.print(i + " ");
                sum += i;
            }
            System.out.println();
        }
        System.out.println("Sum: " + sum);
    }
```

```
}
```

7. **Retrieve Email address from a text field and validate whether "@" symbol available or not and retrieve password from a text field and validate whether it contains 7 characters or not.**

```
package com.coderbd.questions;
import java.util.*;
public class EmailValid {

    public static void main(String[] args) {

        Scanner s = new Scanner(System.in);
        System.out.println("Enter Email");

        String email = s.nextLine();
        int atpos = email.indexOf("@");
        int dotpos = email.indexOf(".");

        if (atpos > 0 && dotpos < email.length() - 1 && atpos < dotpos - 1) {
            System.out.println("Email is valid");
        } else {
            System.out.println("Email is invalid");
        }

    }
}
```

…….PassWord……

```
package com.coderbd.questions;

import java.util.Scanner;

public class PassWordEx {

    static Scanner sc = new Scanner(System.in);

    public static void main(String[] args) {

        String password = sc.nextLine();
        if (password.length() >= 7) {
            System.out.println("Valid");
        } else {
            System.out.println("Not Valid");
        }
    }
}
```

8. **Find out 1 1 2 3 5 8 13 21 34 55 ……**

```
package com.coderbd.questions;

import com.coderbd.*;

public class Febonacci {

    public static void main(String[] args) {
        int a, b, c;
        for (a = 0, b = 1, c = 0; c <= 100; a = b, b = c, c = a + b) {
            System.out.print(c + " ");
        }
```

```
    }
}
```

9. Create an Array which has five value and display its value ascending or descending order.

```
package com.coderbd.questions;

import java.util.Arrays;
import java.util.Collections;
import java.util.Scanner;

public class OneDFromScannerAseendingDecending {
// Array Print Directly

    public static void main(String[] args) {

        Scanner sc = new Scanner(System.in);
        int arraySize = sc.nextInt();
        Integer[] arr = new Integer[arraySize];

        for (int i = 0; i < arr.length; i++) {
            arr[i] = sc.nextInt();
        }
        Arrays.sort(arr);
        Collections.reverse(Arrays.asList(arr));
        System.out.println(Arrays.toString(arr));

    }

}
```

10. Find out the Max-Min number among n number of values.

```
package com.coderbd.questions;

import java.util.Arrays;
import java.util.Collections;
import java.util.Scanner;

public class MaxMinFromNNumbers {

    static Scanner sc = new Scanner(System.in);

    public static void main(String[] args) {
        int n = sc.nextInt();
        Integer[] arr = new Integer[n];

        for (int i = 0; i < arr.length; i++) {
            arr[i] = sc.nextInt();
        }
        Arrays.sort(arr);
        System.out.println("Min: " + arr[0]
                + " Max: " + arr[arr.length - 1]);

    }
}
```

11. Find out the ten unique Random numbers.

```
package com.coderbd.questions;

import java.util.HashSet;
import java.util.Random;
import java.util.Set;

public class Random10UniqueNumbers {

    public static void main(String[] args) {
        Random rand = new Random(100);
        Set<Integer> unique = new HashSet();

        for (int i = 1; i <= 10; i++) {
            int num = rand.nextInt(50) + 50;
            unique.add(num);
        }

        for (int i : unique) {
            System.out.println(i + " ");
        }
    }

}
```

12. Find out the conditional sum until input Zero (0).

```
package com.coderbd.questions;

import com.coderbd.*;
import java.util.Scanner;

public class SumButExitWithZero {

    public static void main(String[] args) {
        int sum = 0;
        Scanner sc = new Scanner(System.in);
        int n = 0;
        System.out.println("Please enter a Num: ");
        do {
            n = sc.nextInt();
            sum += n;
        } while (n != 0);// jodi 0 dei, then nicher line dorkar nei
        // sum += n;
        System.out.println("Sum: " + sum);
    }
}
```