

Program: 1a

```
import java.util.Scanner;

public class FindSquareRootExample1 {

    public static void main(String[] args) {

        System.out.print("Enter a number: ");

        Scanner sc = new Scanner(System.in);

        int n = sc.nextInt();

        int sqrt = squareRoot(n);

        System.out.println("The square root of " + n + " is: " + sqrt);

        sc.close();

    }

    public static int squareRoot(int num) {

        if (num == 0 || num == 1) return num;

        double sqrtroot = num / 2.0;

        double t;

        double epsilon = 1e-7;

        do {

            t = sqrtroot;

            sqrtroot = (t + num / t) / 2.0;

        } while (Math.abs(t - sqrtroot) > epsilon);

        return (int) sqrtroot;

    }

}
```

Output:

Enter a number to find sqrt: 10

3

Program : 1b

```
import java.util.Scanner;

public class JavaHungry {

    public static void main(String args[]) {

        System.out.println("Enter any number: ");

        Scanner scan = new Scanner(System.in);

        Integer inputNumber = scan.nextInt();

        checkUglyNumber(inputNumber);

        scan.close();

    }

    public static void checkUglyNumber(Integer inputNumber) {

        int num = inputNumber;

        while (num != 1) {

            if (num % 2 == 0)

                num /= 2;

            else if (num % 3 == 0)

                num /= 3;

            else if (num % 5 == 0)

                num /= 5;

            else {

                System.out.println(inputNumber + " is NOT an Ugly Number");

                return;

            }

            System.out.println(inputNumber + " is an Ugly Number");

        }

    }

}
```

Output:

Enter a number to its ugly or not: 90

90 is an ugly number

Program: 1c

```
import java.util.Arrays;

public class ProductExceptSelf {

    public static int[] productExceptSelf(int[] nums) {

        int n = nums.length;

        int[] left = new int[n];

        int[] right = new int[n];

        int[] answer = new int[n];

        left[0] = 1;

        for (int i = 1; i < n; i++) {

            left[i] = nums[i - 1] * left[i - 1];

        }

        right[n - 1] = 1;

        for (int i = n - 2; i >= 0; i--) {

            right[i] = nums[i + 1] * right[i + 1];

        }

        for (int i = 0; i < n; i++) {

            answer[i] = left[i] * right[i];

        }

        return answer;

    }

    public static void main(String[] args) {

        int[] ar = {1, 2, 3, 4, 5};

        int[] result = productExceptSelf(ar);

        System.out.println("Input Array: " + Arrays.toString(ar));

        System.out.println("Product Except Self: " + Arrays.toString(result));

    }

}
```

Output:

Product Array: [24,12,8,6]