

//1. Write a program to check whether a person is eligible to vote (age ≥ 18).

```
import java.util.Scanner;

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

        System.out.println("Enter your age: ");
        int age = sc.nextInt();

        if (age < 18) {
            System.out.println("You are not eligible to vote");
        } else if (age >= 18) {
            System.out.println("You are eligible to vote");
        }

        sc.close();
    }
}
```

Sample Input	Sample Output
11	<p>Run Main</p> <p>Clear Run Stop Copy Paste More</p> <p>"C:\Program Files\Java\jdk-25\bin\java Enter your age: 11 You are not eligible to vote Process finished with exit code 0</p>
19	<p>Run Main</p> <p>Clear Run Stop Copy Paste More</p> <p>"C:\Program Files\Java\jdk-25\bin\java Enter your age: 19 You are eligible to vote Process finished with exit code 0</p>

//2. Write a program to assign grades based on marks:
//80–100 → A, 70–79 → B, 60–69 → C, Below 60 → Fail

```
import java.util.Scanner;

public class Main {
    public static void main(String[] args){
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter your number: ");
        int number = sc.nextInt();

        if(number >= 80 && number <= 100){
            System.out.println("Grade: A");
        } else if(number >= 70 && number <= 79){
            System.out.println("Grade: B");
        } else if(number >= 60 && number <= 69){
            System.out.println("Grade: C");
        } else if(number <= 59){
            System.out.println("Grade: Fail");
        } else{
            System.out.println("Wrong number");
        }

        sc.close();
    }
}
```

```
//Write a Java program to take a number n: If n is even, print 0; If n is odd, print the sum of digits of n
import java.util.Scanner;

public class Main {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter a number: ");
        int n = sc.nextInt();

        if (n == 1) {
            System.out.println("Odd");
        } else if (n % 2 == 0) {
            System.out.println(0);
        } else {
            System.out.println("Odd");
        }
    }
}
```

Sample Input	Sample Output
10	<p>Run Main</p> <p>↻ ☐ 📸 ⌂ :</p> <p>↑ "C:\Program Files\Java\jdk-25\bin\j</p> <p>↓ Enter a number:</p> <p>⤵ 10</p> <p>⤷ 0</p> <p>⤸ Process finished with exit code 0</p> <p>⤹ </p>
121	<p>Run Main</p> <p>↻ ☐ 📸 ⌂ :</p> <p>↑ "C:\Program Files\Java\jdk-25\bin\j</p> <p>↓ Enter a number:</p> <p>⤵ 121</p> <p>⤷ Odd</p> <p>⤸ Process finished with exit code 0</p> <p>⤹ </p>

```
//4. Find the max and min of 3 numbers.  
// a. Inside main, declare 3 integer variables and assign 3 different values.  
// b. Implement the logic to find the max and min of those 3 values and print the values.
```

```
public class Main {  
    public static void main(String[] args){  
        int a = 10;  
        int b = 90;  
        int c = 30;  
  
        if(a > b && a > c){  
            System.out.println("Max of this 3 number is: " +a);  
        } else if (b > a && b > c) {  
            System.out.println("Max of this 3 number is: " +b);  
        }else{  
            System.out.println("Max of this 3 number is: " +c);  
        }  
    }  
}
```

Sample Input	Sample Output
	<p>Run Main ×</p> <p>↻ ☐ 📸 :</p> <p>↑ "C:\Program Files\Java\jdk-25\bin\java.e ↓ Max of this 3 number is: 90 ☰ Process finished with exit code 0 🖨️ </p>

//5. Write a Java program to find the summation and average of 3 integer values.

```
import java.util.Scanner;

public class Main {
    public static void main(String[] args){
        Scanner sc = new Scanner(System.in);
        System.out.println("Input three numbers: ");
        float num1 = sc.nextInt();
        float num2 = sc.nextInt();
        float num3 = sc.nextInt();

        float sum = num1 + num2 + num3;
        System.out.println("Summation is = " +sum);

        float avg = sum / 3;
        System.out.println("Average is = " +avg);

        sc.close();
    }
}
```

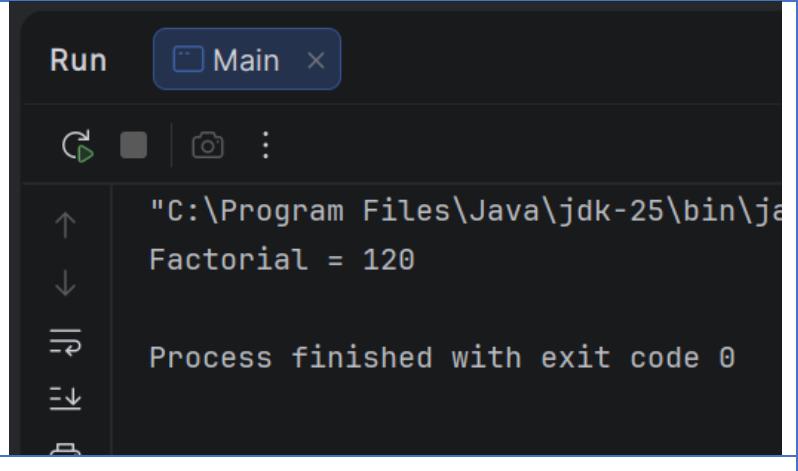
Sample Input	Sample Output
5 10 15	Run Main C:\Program Files\Java\jdk-25\bin\java Input three numbers: 5 10 15 Summation is = 30.0 Average is = 10.0 Process finished with exit code 0
45 89 62	Run Main C:\Program Files\Java\jdk-25\bin\java Input three numbers: 45 89 62 Summation is = 196.0 Average is = 65.333336 Process finished with exit code 0

//6. Find the factorial of a given number.

```
public class Main {  
    public static void main(String[] args){  
        int num = 5;  
        int fact = 1;  
  
        for(int i = 1; i <= num; i++){  
            fact *= i;  
        }  
        System.out.println("Factorial = " +fact);  
    }  
}
```

Sample Input

Sample Output



The screenshot shows a Java application window. At the top, there's a toolbar with icons for Run, Stop, and others. Below the toolbar, the title bar says "Main". The main area contains a terminal-like interface. On the left, there are scroll bars and some small icons. The right side displays the following text:
"C:\Program Files\Java\jdk-25\bin\ja
Factorial = 120
Process finished with exit code 0

//7. Print all numbers between 1 and n that are divisible by 3 and 5.

```
import java.util.Scanner;

public class Main {
    public static void main(String[] args){
        Scanner sc = new Scanner(System.in);
        int n = sc.nextInt();

        for(int i = 1; i <= n; i++){
            if(i % 3 == 0 || i % 5 == 0){
                System.out.println(i);
            }
        }

        sc.close();
    }
}
```

Sample Input

20

Sample Output

Run Main

↶	"C:\Program
↓	20
⤒	3
⤓	5
⤔	6
🖨️	9
刪	10
	12
	15
	18
	20

Process finished with exit code 0

5

Run Main ×

A set of small, semi-transparent navigation icons located in the bottom right corner of the slide.

↑ "C:\Progra

二

"C:\Program Files\Java\jdk-25\bin\ja

三

5

F

Lab 2 Classwork Tasks

//1. Write a Java application that will prompt the user to provide a number as input.
// Read input as a number and display the square of the number.

```
import java.util.Scanner;

public class Main {
    public static void main(String[] args){
        Scanner sc = new Scanner(System.in);
        System.out.print("Input a number: ");
        long n = sc.nextInt();

        System.out.println(n*n);

        sc.close();
    }
}
```

Sample Input	Sample Output
25	<p>Run Main</p> <p>↻ ⌂ 📸 ⌚ ⋮</p> <p>"C:\Program Files\Java\jdk-25\bin\ja Input a number: 25 625 Process finished with exit code 0</p>
4	<p>Run Main</p> <p>↻ ⌂ 📸 ⌚ ⋮</p> <p>"C:\Program Files\Java\jdk-25\bin\j Input a number: 4 16 Process finished with exit code 0</p>

```
//2. Write a java program that will prompt the user to provide a number as input. Read input  
//as a number and display whether the number is even or odd.
```

```
import java.util.Scanner;  
  
public class Main{  
    public static void main(String[] args){  
        Scanner sc = new Scanner(System.in);  
        int n = sc.nextInt();  
  
        if(n % 2 == 0){  
            System.out.println("Even");  
        }else{  
            System.out.println("Odd");  
        }  
  
        sc.close();  
    }  
}
```

Sample Input	Sample Output
25	<p>Build Run Main</p> <p>↑ 25 ↓ Odd → ← Process finished with exit code 0</p>
50	<p>Run Main</p> <p>↑ 50 ↓ Even → ← Process finished with exit code 0</p>

//3. Write a java program to determine whether a given number is prime or not.

```
import java.util.Scanner;

public class Main {
    public static void main(String[] args){
        Scanner sc = new Scanner(System.in);
        int n = sc.nextInt();
        boolean isPrime = true;

        for(int i = 2; i < n; i++){
            if(n % i == 0){
                isPrime = false;
                break;
            }
        }
        if(isPrime == true){
            System.out.println("Given number is Prime");
        }else{
            System.out.println("Given number is Not Prime");
        }

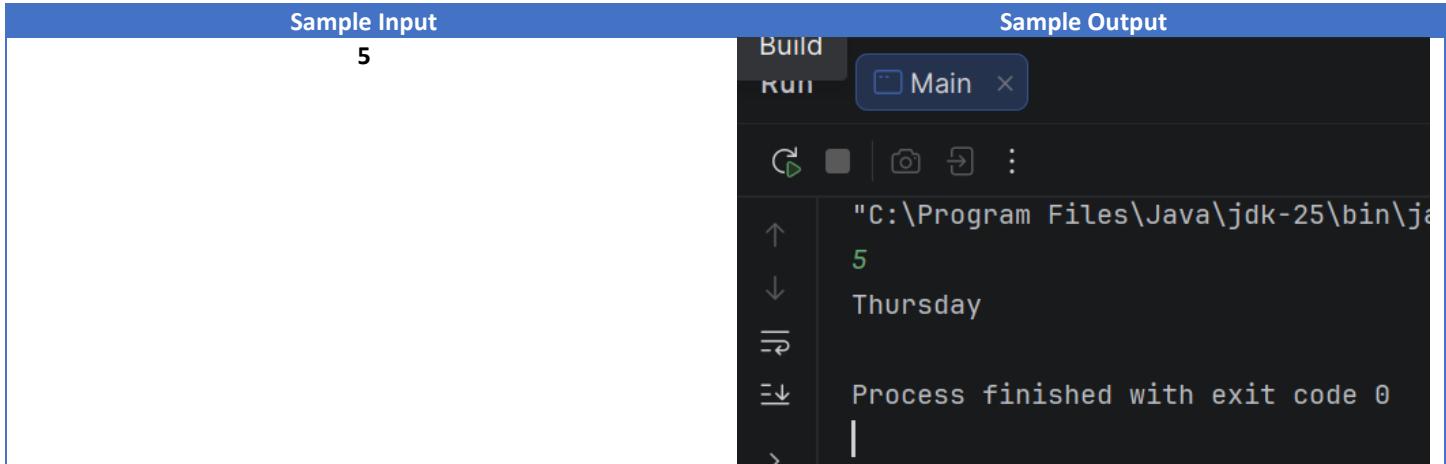
        sc.close();
    }
}
```

The screenshot shows a Java development environment with two terminal windows. The top window has 'Sample Input' labeled '57' and 'Sample Output' showing the program's response. The bottom window has 'Sample Input' labeled '7' and 'Sample Output' showing the program's response. Both windows include standard terminal navigation keys (up, down, etc.) and a status bar at the bottom.

Sample Input	Sample Output
57	"C:\Program Files\Java\jdk-25\bin\java 57 Given number is Not Prime Process finished with exit code 0
7	"C:\Program Files\Java\jdk-25\bin\java 7 Given number is Prime Process finished with exit code 0

```
//4. Write a program that will take an integer number, and print the day of the week  
//depending on the number. To find the day of the week, you need to divide the number  
//by 7 and find the remainder. The day will have the following value depending on the  
//remainder.
```

```
import java.util.Scanner;  
  
public class Main {  
    public static void main(String[] args){  
        Scanner sc = new Scanner(System.in);  
        int n = sc.nextInt();  
  
        switch(n){  
            case 0:  
                System.out.println("Saturday");  
                break;  
            case 1:  
                System.out.println("Sunday");  
                break;  
            case 2:  
                System.out.println("Monday");  
                break;  
            case 3:  
                System.out.println("Tuesday");  
                break;  
            case 4:  
                System.out.println("Wednesday");  
                break;  
            case 5:  
                System.out.println("Thursday");  
                break;  
            case 6:  
                System.out.println("Friday");  
                break;  
            default:  
                System.out.println("Unknown");  
        }  
  
        sc.close();  
    }  
}
```



The screenshot shows a Java development environment with two panes: 'Sample Input' and 'Sample Output'. The 'Sample Input' pane contains the number '5'. The 'Sample Output' pane shows the execution results. At the top, there are tabs for 'Build' and 'Run', with 'Main' selected. Below the tabs is a toolbar with icons for running, stopping, and other operations. The output area displays the command prompt 'C:\Program Files\Java\jdk-25\bin\java', the input '5', the output 'Thursday', and the message 'Process finished with exit code 0'.

Sample Input	Sample Output
5	C:\Program Files\Java\jdk-25\bin\java 5 Thursday Process finished with exit code 0

//5. Write a program that will take two integer numbers from user, and print the LCM of those numbers.

```
import java.util.Scanner;

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

        System.out.println("Enter the first number: ");
        int num1 = sc.nextInt();

        System.out.println("Enter the second number: ");
        int num2 = sc.nextInt();

        int max = (num1 > num2) ? num1 : num2;
        int lcm = max;

        for(int i = max; ;i++){
            if(i % num1 == 0 && i % num2 == 0){
                lcm = i;
                break;
            }
        }

        System.out.println("LCM Is = " +lcm);

        sc.close();
    }
}
```

Sample Input	Sample Output
15 20	<p>Run Main</p> <p>C Main</p> <p>↑</p> <p>↓</p> <p>←</p> <p>→</p> <p>Print</p> <p>trash</p> <pre>"C:\Program Files\Java\jdk-25\bin\j Enter the first number: 15 Enter the second number: 20 LCM Is = 60 Process finished with exit code 0</pre>

```
//6. Write a Java program that will take 10 numbers from user and only print the numbers  
// (among those 10 numbers) that are divisible by 3 or 5 but not both.
```

```
import java.util.Scanner;

public class Main{
    public static void main(String[] args){
        Scanner sc = new Scanner(System.in);
        int[] arr = new int[10];

        for(int i = 0; i < 10; i++){
            arr[i] = sc.nextInt();
        }

        for(int i = 0; i < 10; i++){
            if((arr[i] % 3 == 0 || arr[i] % 5 == 0) && !(arr[i] % 3 == 0 && arr[i] % 5 == 0)){
                System.out.println(arr[i]);
            }
        }
    }
}
```

Sample Input	Sample Output
15 5 3 7 8 9 12 99 121 698	<p>Run Main</p> <p>Up Arrow Down Arrow Left Arrow Right Arrow Print Delete</p> <pre>"C:\Program Files\Java\jdk-25\bin\java 15 5 3 7 8 9 12 99 121 698 5 3 9 12 99</pre> <p>Process finished with exit code 0</p>

//7. Write a program in java to display the summation of the even digits of a number.

```
import java.util.Scanner;

public class Main {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        int n = sc.nextInt();

        int sum = 0;
        int digit;

        while (n > 0) {
            digit = n % 10;

            if (digit % 2 == 0) {
                sum += digit;
            }

            n = n / 10;
        }

        System.out.println(sum);
    }
}
```

Sample Input	Sample Output
25468731	<p>Run Main</p> <p>↻ ⌂ 📸 ⏷ ⋮</p> <p>↑ ↓ ⏵ ⏴</p> <pre>"C:\Program Files\Java\jdk-25\bin\java 25468731 20 Process finished with exit code 0</pre>
12345	<p>Run Main</p> <p>↻ ⌂ 📸 ⏷ ⋮</p> <p>↑ ↓ ⏵ ⏴</p> <pre>"C:\Program Files\Java\jdk-25\bin\java 12345 6 Process finished with exit code 0</pre>

//2.8. Write a java program to print the Fibonacci series up to n th item. The value of n will be provided by the user as input

```
import java.util.Scanner;

public class Main {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        int n = sc.nextInt();
        int a = 1, b = 1;

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

            if (i < n) {
                System.out.print(", ");
            }

            int next = a + b;
            a = b;
            b = next;
        }

        sc.close();
    }
}
```

Sample Input	Sample Output										
9	<p>Run Main ×</p> <p>↻ ⌂ 📸 ↗ :</p> <table border="1"><tr><td>↑</td><td>"C:\Program Files\Java\jdk-25\bin\java</td></tr><tr><td>↓</td><td>9</td></tr><tr><td>⤵</td><td>1, 1, 2, 3, 5, 8, 13, 21, 34</td></tr><tr><td>⤶</td><td>Process finished with exit code 0</td></tr><tr><td>⤷</td><td> </td></tr></table>	↑	"C:\Program Files\Java\jdk-25\bin\java	↓	9	⤵	1, 1, 2, 3, 5, 8, 13, 21, 34	⤶	Process finished with exit code 0	⤷	
↑	"C:\Program Files\Java\jdk-25\bin\java										
↓	9										
⤵	1, 1, 2, 3, 5, 8, 13, 21, 34										
⤶	Process finished with exit code 0										
⤷											
2	<p>Run Main ×</p> <p>↻ ⌂ 📸 ↗ :</p> <table border="1"><tr><td>↑</td><td>"C:\Program Files\Java\jdk-25\bin\ja</td></tr><tr><td>↓</td><td>2</td></tr><tr><td>⤵</td><td>1, 1</td></tr><tr><td>⤶</td><td>Process finished with exit code 0</td></tr><tr><td>⤷</td><td> </td></tr></table>	↑	"C:\Program Files\Java\jdk-25\bin\ja	↓	2	⤵	1, 1	⤶	Process finished with exit code 0	⤷	
↑	"C:\Program Files\Java\jdk-25\bin\ja										
↓	2										
⤵	1, 1										
⤶	Process finished with exit code 0										
⤷											