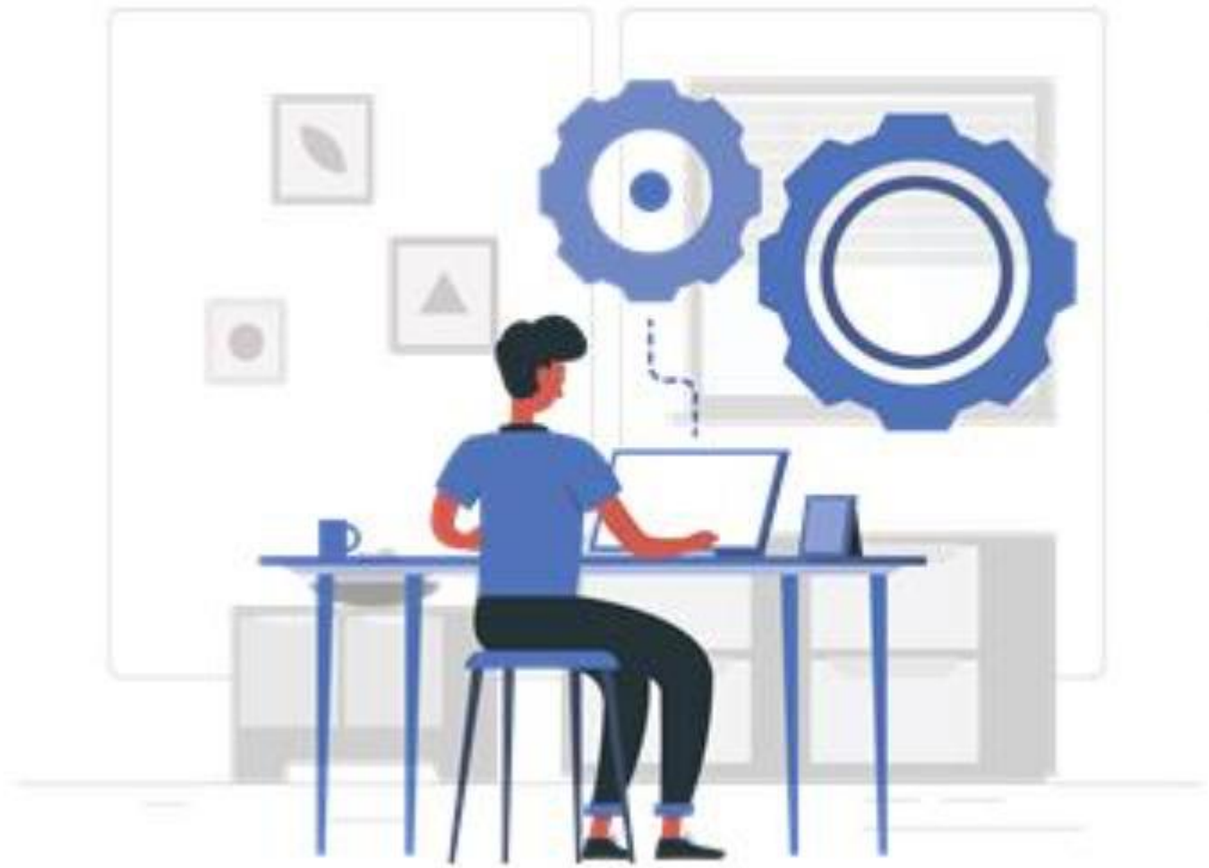

Practice

Looping Constructs

Practice Exercises

- Practice 1: Add Number
- Practice 2: Reverse Digit
- Practice 3: Sum of Even and Odd

PRACTICE 1

Practice 1: Add Number

John has to add all the numbers from 1 to 100. Help John complete the task using a loop.

Note: Steps to do this practice is given in the upcoming slide.

Practice 1: Tasks

- Write a class called **AddNumber**.
- Inside the class, write the main method.
- Write all the lines of the code inside the main method.
- Use loop to iterate through numbers starting from 1 to 100 and add them.
- Store the sum of all the numbers in a variable and print the sum.

PRACTICE 2

Practice 2: Reverse Digits

Ron and Steve are playing a reverse number game where one has to give an integer to the other.

The other person receiving the integer needs to reverse the number and display the output.

If any one of them fails to reverse the number, the game ends.

Write a Java program to reverse the number, store the reversed number in a variable, and print it.

Note: Steps to do this practice are given in the upcoming slide.

Practice 2: Tasks

- Write a class **ReverseDigit**.
- Inside the class write the main method.
- Write all the lines of code inside the main method.
- Accept the number as input from the user utilizing the Scanner and store it in a variable.
- Write the logic to reverse the number.
- Display the reversed number.
  - `Sample Input - 12131`
  - `Sample Output - 13121`
  - `Sample Input - 34567`
  - `Sample Output - 76543`

Input and Output: 1

Sample Input

```
-21
```

Expected Output

Note that the output must contain the below lines in the same format.

```
Input number cannot be negative.
```

Input and Output: 2

Sample Input

```
4567364
```

Expected Output

Note that the output must contain the below lines in the same format.

```
The reverse of the given number is: 4637654.
```

PRACTICE 3

Practice 3: Sum of Even and Odd

Jenny is a teacher. She gives an eight-digit number to Bob and wants him to determine whether each digit is even or odd.

If it is an even number, then he should display the sum of the even digits.

If it is an odd number, then he should display the sum of the odd digits.

Practice 3: Tasks

- Write a class called **EvenOddSum**.
- Inside the class write the main method.
- Write all the lines of code inside the main method.
- Accept an eight-digit number as input from the user utilizing the Scanner and store it in a variable.
- Pick each digit of the number and check if it is odd or even.
  - If the digit is even, add all the even numbers and store the sum in a variable.
  - If the digit is odd, add all the odd numbers and store the sum in a variable.
  - Display both the variables.

Input and Output: 1

Sample Input

```
-21
```

Expected Output

Note that the output must contain the below lines in the same format.

```
Input number cannot be negative.
```

Input and Output: 2

Sample Input

```
4567364
```

Expected Output

Note that the output must contain the below lines in the same format.

```
Sum of even numbers 20.
Sum of odd numbers 15.
```