

Readme – Ex1 Group 8

1. Overview:

This program is a base conversion calculator, built as part of Assignment A for the course. The application allows a user to convert non-negative integers between binary and decimal bases, and vice-versa, while also handling invalid user inputs.

2. Setup and Execution:

Requirements:

- **Recommended IDE:** Eclipse IDE for Java Developers (Version 2023-09 or newer).
- **Required Java Version:** Java JDK 21 (or newer).
- The project was developed and tested using these specific versions to ensure compatibility.

Importing the Project into Eclipse:

These instructions assume the operator has the project files on their local machine (either by cloning the group8 branch or by downloading the branch ZIP from the Pull Request). To ensure the project is imported correctly with all Java settings, please follow these steps:

1. Open Eclipse IDE.
2. Go to **File > New > Java Project**.
3. In the Project name field, enter a name that identifies the group, for example:
Group8_AssignmentA.
4. **Crucially:** Uncheck the box Use default location.
5. In the Location field that appears, click Browse... and select the **root folder** of the project (the folder that contains the EX1, Students, and README.md files).
6. Ensure the JRE is set to JavaSE-21 (or newer).
7. Click **Finish**.

Eclipse will now automatically detect the existing code, configure the EX1 package, and set up the project correctly.

Running the Application:

1. Once the project is imported, it will appear in the "Package Explorer" view (under the name you chose, e.g., Group8_AssignmentA).
2. Expand the project folder.
3. Expand the src folder.
4. Expand the EX1 package.
5. Expand the EX1.group8 package. (This is the package where all our files are located).
6. Right-click on the file **Ex1Main.java**.
7. Select **Run**.

The program will now launch in the "Console" tab (usually at the bottom of the screen), displaying the main menu in Hebrew.

3. User Guide:

The program operates via a simple console menu.

- Main Menu: Upon launch, the user is prompted to enter 1, 2, or 3 to select an operation.
- Operation: Based on the choice, the user is then prompted to enter the number (binary or decimal) for conversion.
- Result: The program prints the converted result to the console and returns to the main menu.
- Exit: Entering 3 will print a closing message and terminate the program.