

1. Create an Input File:

- Create a file named `input.txt` or whatever you would like to name it in the same directory where the JAR file (`MyProgram.jar`) is located. This file will be used as input for the program.

2. Install Java:

- Ensure that Java is installed on your machine. If you don't have Java installed, you can download it from [this link \(https://www.java.com/en/download/\)](https://www.java.com/en/download/).

3. Run the JAR File:

- Open a terminal, command prompt, PowerShell, or the integrated terminal in Visual Studio Code.
- Navigate to the directory where the JAR file (`MyProgram.jar`) is located.
- Execute the following command to run the JAR file:

```
java -jar MyProgram.jar
```

4. Input:

- The input file should contain the input data for the program - ensure that tokens are delimited with spaces and all function parameters are pre declared in a parent or global scope. Here is an example of the input format:

```

main
num V_a, num V_b, num V_c,
begin
    V_a = F_euclid(9, 3, 0);
    print V_a;
end

num F_euclid(V_a, V_b, V_c)
{
    num V_d, text V_e, text V_f,
    begin

        if eq(V_a, V_b)
        then
            begin
                return V_a;
            end
        else
            begin
                if grt(V_a, V_b)
                then
                    begin
                        V_a = sub(V_a, V_b);
                    end
                else
                    begin
                        V_b = sub(V_b, V_a);
                    end;
                V_c = F_euclid(V_a, V_b, V_c);
                return V_c;
            end;
        end
    end
}
end

```

5. Run the Program:

- While running the program, you will be prompted to enter the name of the input file. Enter the name of the input file (e.g., `input.txt`) and press Enter.

6. View the Output:

- The program will read the input from the `input` file, process it, and display the output in the terminal as well as write to an output folder - outputs included

- Syntax tree before scope analyzing.
- Syntax tree after scope analyzing.
- Intermediate code - For phase 5.a and 5.b.
- Target code - For phase 5.b The rest is outputed to the terminal.

7. Run Output BASIC:

- To run the output BASIC code, install the BASIC interpreter on your machine and paste in the target code from the output folder. You can download a BASIC interpreter from [this link \(https://qb64.com\)](https://qb64.com).