Programming Assignment 3-1

1. Problem Definition

The primary purpose of this program is to display the smallest integer from three random integers. Three random numbers that range between 0 to 100 will be generated, and the smallest among the three will be printed out.

2. Input & Output

Input: none. All outputs will be automatically displayed when running the file.

Output: three random integers ranged between 0 to 100 and one smallest integer among the three.
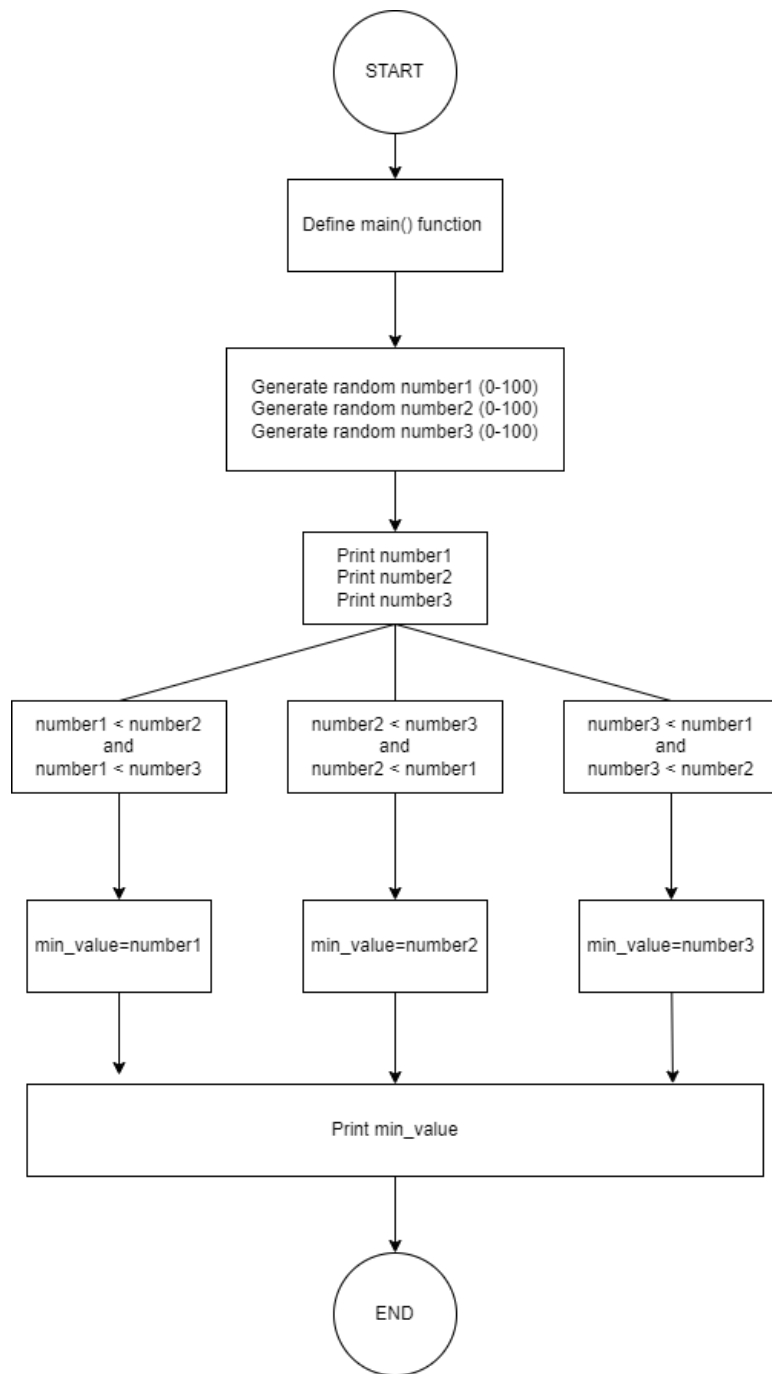
3. Variables

number1 = first random number

number2 = second random number

number3 = third random number

min_value = the smallest number among the three

4. Flow Chart

```
                    ┌─────────┐
                    │  START  │
                    └─────────┘
                         │
                         ▼
            ┌──────────────────────┐
            │ Define main() function│
            └──────────────────────┘
                         │
                         ▼
        ┌────────────────────────────────┐
        │ Generate random number1 (0-100) │
        │ Generate random number2 (0-100) │
        │ Generate random number3 (0-100) │
        └────────────────────────────────┘
                         │
                         ▼
              ┌───────────────────┐
              │  Print number1    │
              │  Print number2    │
              │  Print number3    │
              └───────────────────┘
              /        │         \
             ▼         ▼          ▼
```

number1 < number2 and number1 < number3	number2 < number3 and number2 < number1	number3 < number1 and number3 < number2
min_value=number1	min_value=number2	min_value=number3

```
              \        │         /
               ▼       ▼        ▼
        ┌────────────────────────────────┐
        │         Print min_value         │
        └────────────────────────────────┘
                         │
                         ▼
                    ┌─────────┐
                    │   END   │
                    └─────────┘
```

5. Errors and Lessons

-Errors:

a. Missing colon after the if statement

b. Missing blocks after the next line after the if statement

c. Can not automatically print out the three numbers

d. Missing f and "" for printing a string

-How to fix:

For 1,2 and 4, add the expected elements, and then problems will be solved.

For 2, use the three variables given at the top of the file then print them out in separate lines.