ALGORITHM AND PROGRAMMING

DEFINING INSTRUCTION

By:

DIMAS RISWANDA PRADANA PUTRA
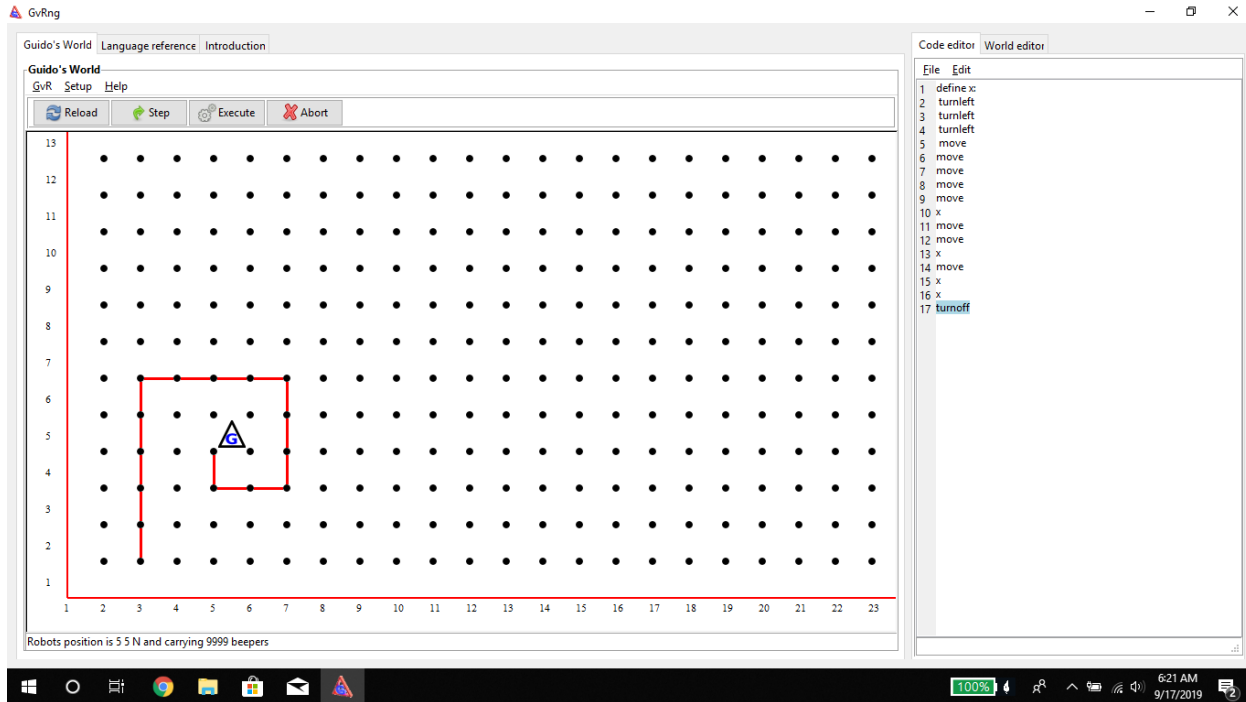
NIM: L200194011

INFORMATION TECHNOLOGY

FACULTY OF COMMUNICATION AND INFORMATICS

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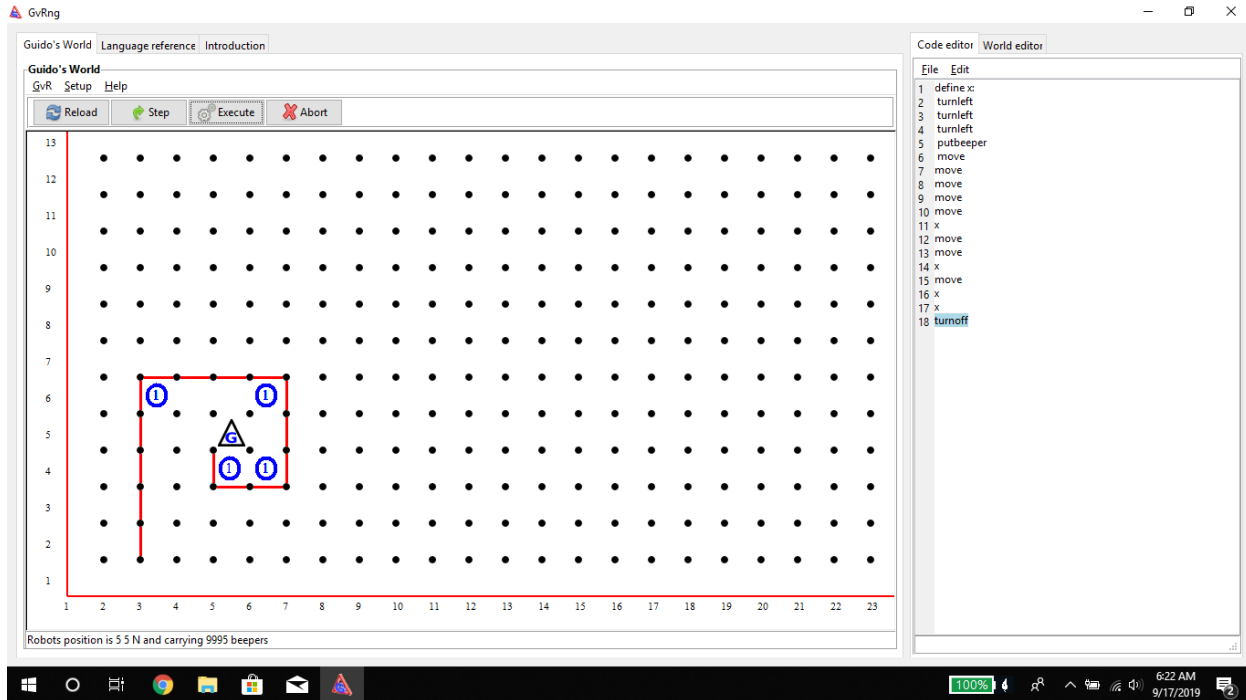## Activity 1

Here is the program I made (less than 20 lines)

Picture 1.1. Guido Van Robot

1. Conclusion

The robot moving to the next of red wall line, and following the red wall line.

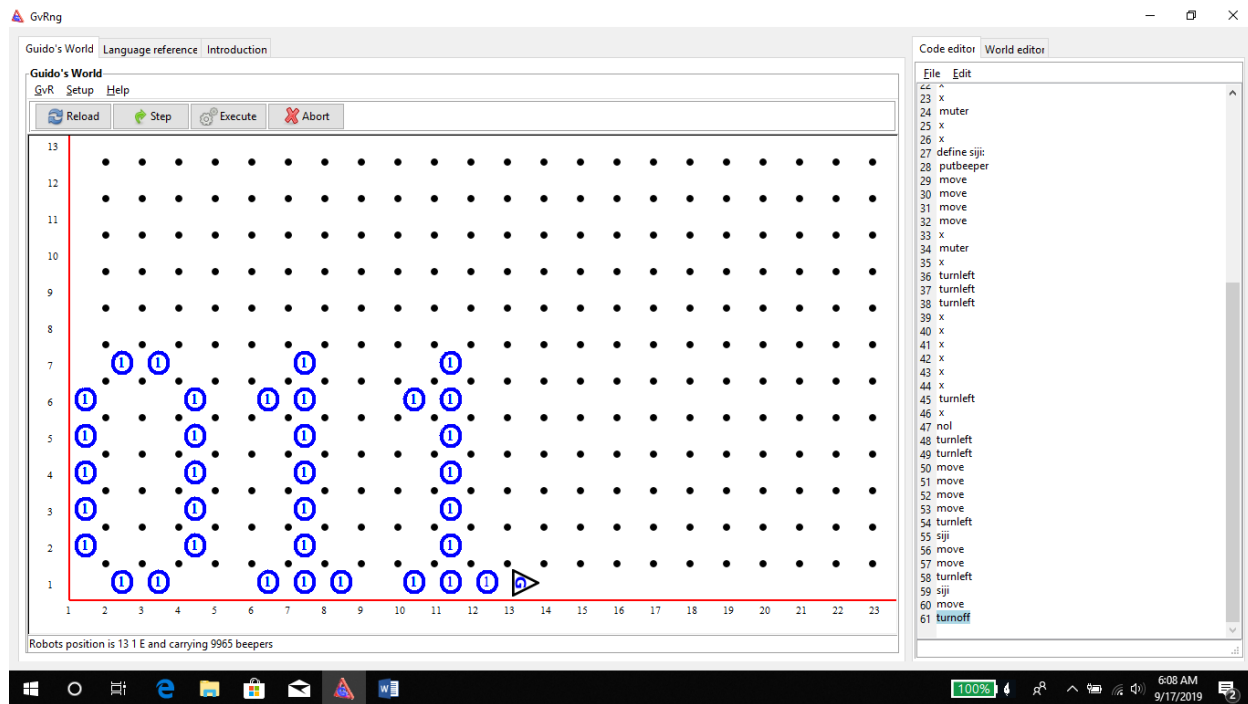**Activity 2**

Here is the program I made (Less than 19 lines)

Picture 2.1. Guido Van Robot

1. Conclusion

The robot moving to the next of red wall line, following the red wall line, and put beeper in every corner.

Activity 3

Here is a screenshot of GvRng after the program running

Picture 3.1. Guido Van Robot

1. How many?

    a. Beepers on my program:

        Answer: 34

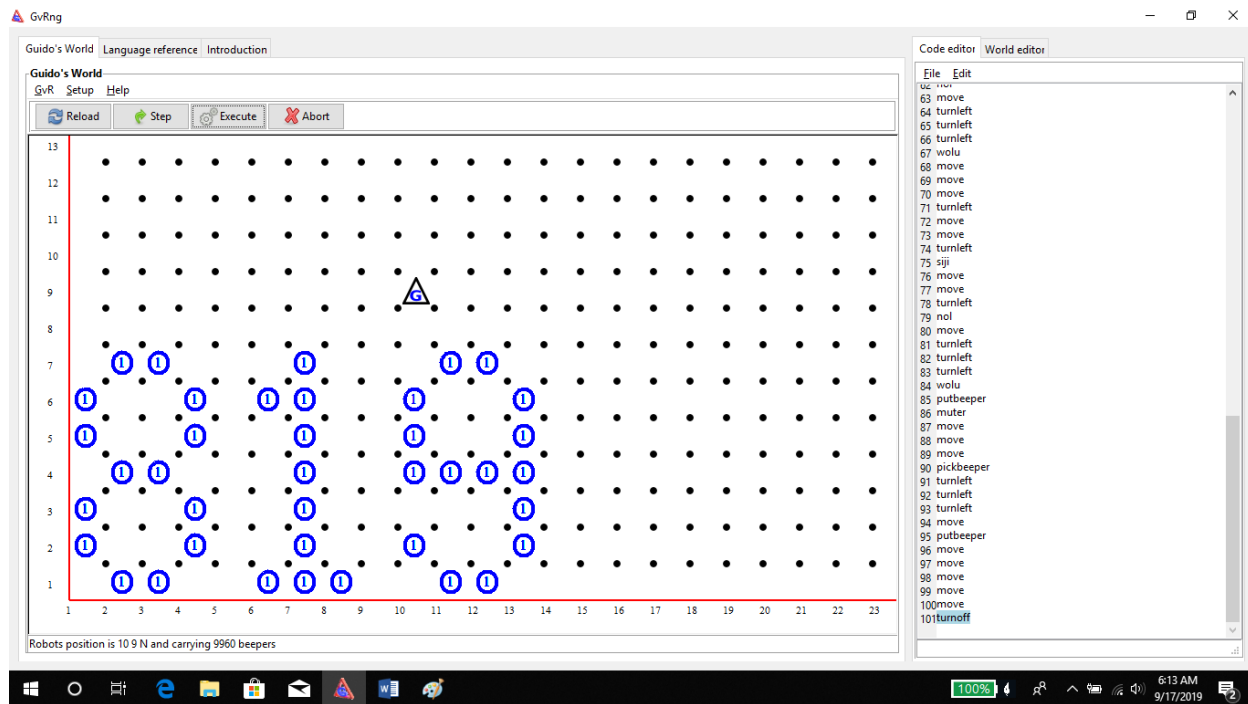   b. Instruction lines on my program:

        Answer: 61

2. Conclusion

The robot making 3 digit number using beepers.

Activity 4

Here is a screenshot of GvRng after the program running

Picture 4.1. Guido Van Robot

1. How many instruction line after

    a. Using template:

        Answer: 132

    b. Using "hadapkanan" function

        Answer: 110

    c. Using "gerakletak" function
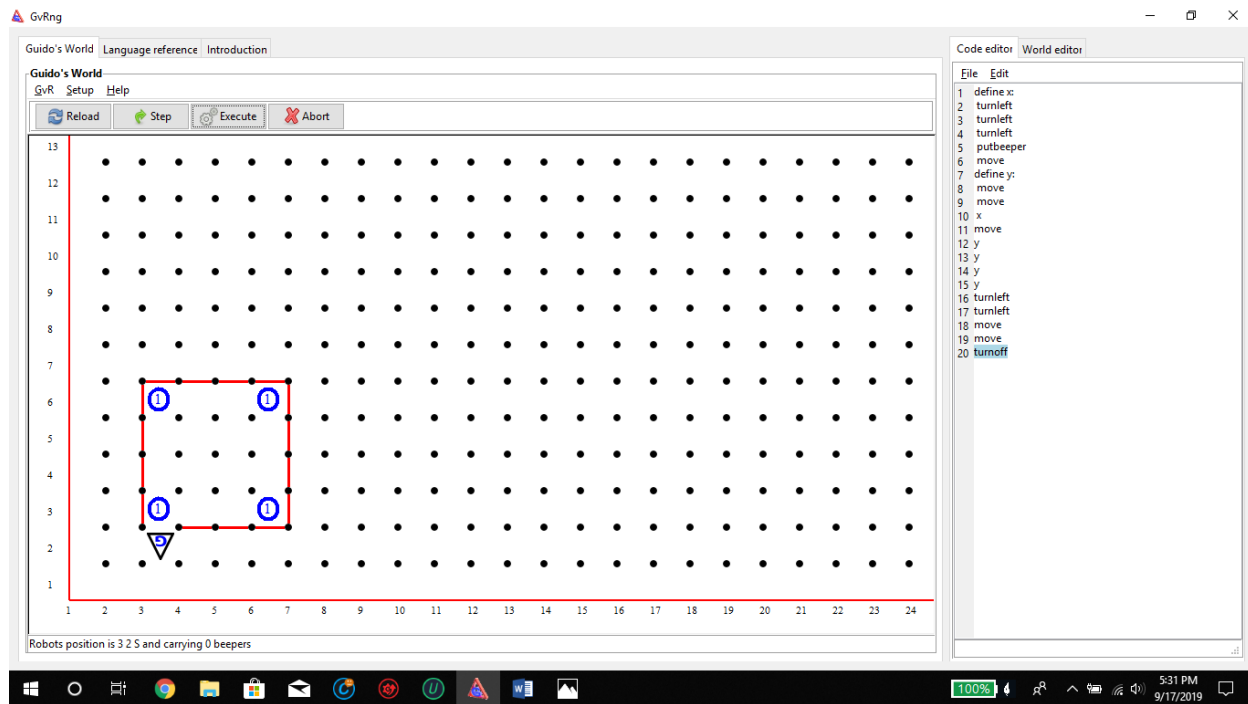
        Answer: 101

2. Conclusion

The robot making 3 digit number using beepers.
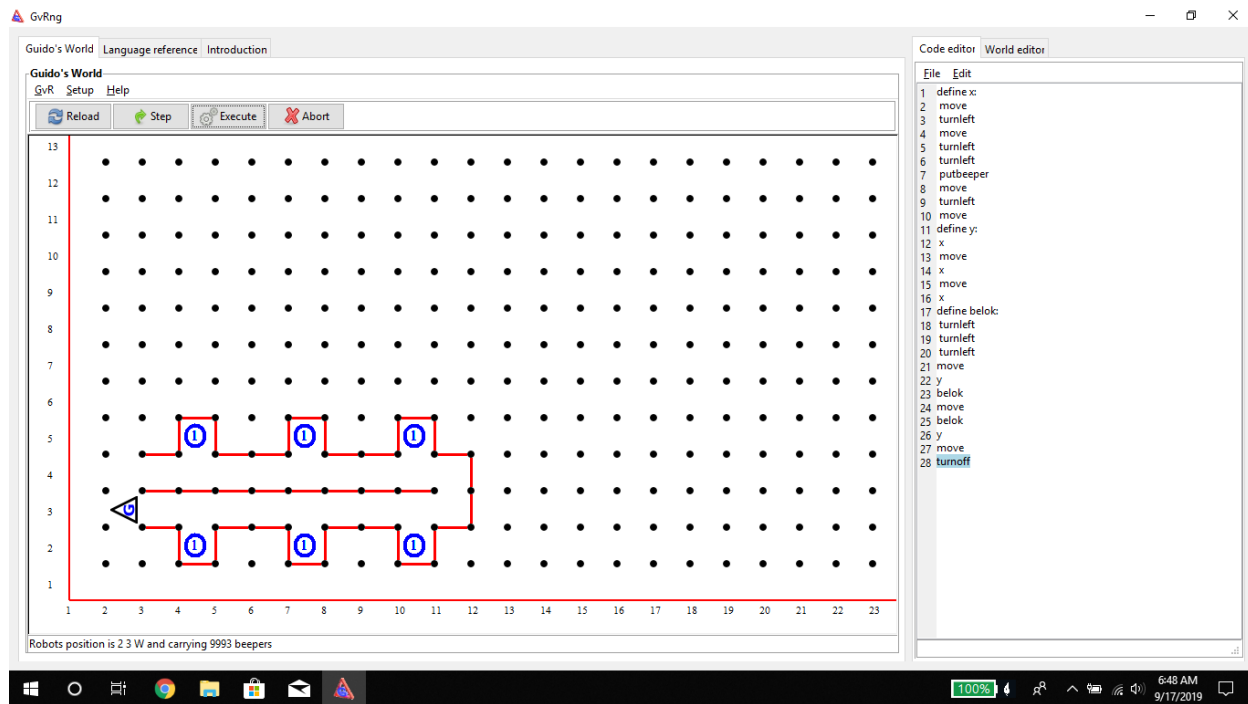
Activity 5

Here is the program I made (20 lines or less)

Instruction lines: 20

Activity 6

Here is a screenshot of GvRng after the program running

Instruction lines : 28