INSTRUCTIONS:

0. **ADDR:**
   Adding two numbers from instructions and storing them in a register specified in the instruction
1. **SUBR:**
   Subtracting two numbers from the instructions and storing them in a register specified in the instruction

2. **MULTIR:**

   Multiplying two numbers from instructions and storing them in a register specified in the instruction

3. **DIVIDR:**
   Dividing two numbers from instructions and storing them in a register specified in the instruction

4. **MODR:**
   Modulating two numbers from instructions and storing them in a register specified in the instruction

5. **GREATR:**
   Checks two numbers from two registers specified in instructions and if it is true, it stores 11111111 in the register specified in instructions else 00000000

6. **LESSR:**
   Checks two numbers from two registers specified in instructions and if it is true, it stores 11111111 in the register specified in instructions else 00000000

7. **EQR:**
   Checks two numbers from two registers specified in instructions and if it is true, it stores 11111111 in the register specified in instructions else 00000000

8. **NEQR:**
   Checks two numbers from two registers specified in instructions and if it is true, it stores 11111111 in the register specified in instructions else 00000000

9. **ASSIGNR:**
   Assigns a value in instruction to a register specified in the instruction

10. **DATAINR:**
    Stores the value from data input pins to a register specified in the instruction

11. **DATAOUTR:**

    Sends the value from the register specified in the instruction to data output pins

12. **OUTPUT_VALUE:**
    Outputs a value in the instruction to the data output pins

13. **JUMPN:**
    Jumps to the nth instruction, value ‘n’ specified in the instruction

14. **JUMPT:**
    If the value in a register specified in instruction is 11111111 then the instruction Jumps to the nth instruction, value ‘n’ specified in the instruction

15. **JUMPF:**

    If the value in a register specified in instruction is 00000000 then the instruction Jumps to the nth instruction, value ‘n’ specified in the instruction