**INSTRUCTIONS**:

1. **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

1. **MULTIR:**

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

1. **DIVIDR:**

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

1. **MODR:**

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

1. **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

1. **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

1. **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

1. **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

1. **ASSIGNR:**

Assigns a value in instruction to a register specified in the instruction

1. **DATAINR:**

Stores the value from data input pins to a register specified in the instruction

1. **DATAOUTR:**

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

1. **OUTPUT\_VALUE:**

Outputs a value in the instruction to the data output pins

1. **JUMPN:**

Jumps to the nth instruction, value ‘n’ specified in the instruction

1. **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

1. **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