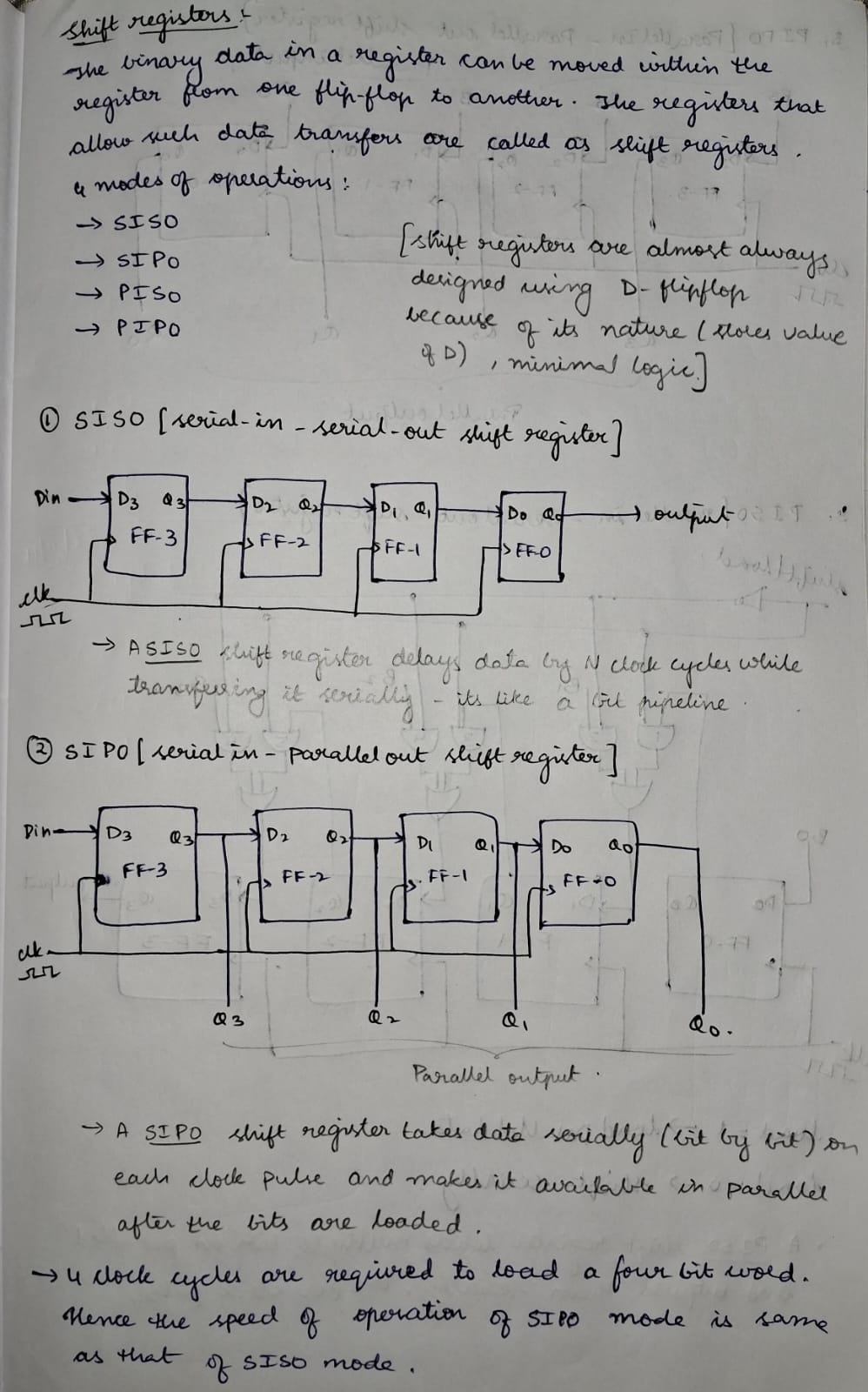
**By Sri Pranathi Challagolla**

**Shift Registers:**

* Shift registers are sequential circuits that store and move binary data through flip-flops in response to clock pulses.
* They come in four types: SISO, SIPO, PISO, and PIPO, based on serial/parallel input-output configurations.
* Common uses include data buffering, serialization, delay elements, and digital signal processing.
* Implementation involves clocked flip-flops with controlled data routing via multiplexers or direct wiring.

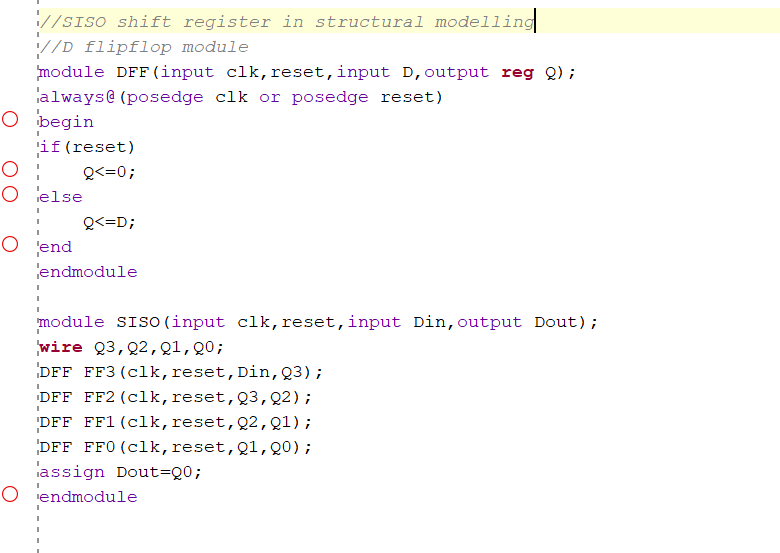


A close-up of a paper

AI-generated content may be incorrect.

**1.Implemented SISO shift register:**

**Design:**

A diagram of a computer

AI-generated content may be incorrect.

A green squares on a black background

AI-generated content may be incorrect.

A screenshot of a computer program

AI-generated content may be incorrect.

**Testbench :**

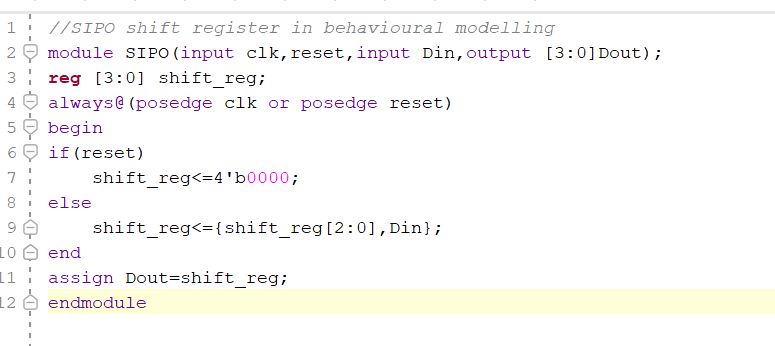


A diagram of a computer

AI-generated content may be incorrect.

**2.Implemented SIPO shift register:**

**Design:**



**Testbench:**

A screenshot of a computer program

AI-generated content may be incorrect.

A screenshot of a computer

AI-generated content may be incorrect.

A screenshot of a computer program

AI-generated content may be incorrect.

**3.Implemented PIPO shift register:**

**Design:**

A screenshot of a computer

AI-generated content may be incorrect.A diagram of a block diagram

AI-generated content may be incorrect.

**Testbench:**

A screenshot of a computer program

AI-generated content may be incorrect.

A screenshot of a video game

AI-generated content may be incorrect.

A screenshot of a computer program

AI-generated content may be incorrect.

A screenshot of a computer code

AI-generated content may be incorrect.

A diagram of a circuit

AI-generated content may be incorrect.

**4.Implemented PISO shift register:**

**Design:**

A screenshot of a computer program

AI-generated content may be incorrect.

**Testbench:**

A screenshot of a computer program

AI-generated content may be incorrect.

A screenshot of a computer

AI-generated content may be incorrect.