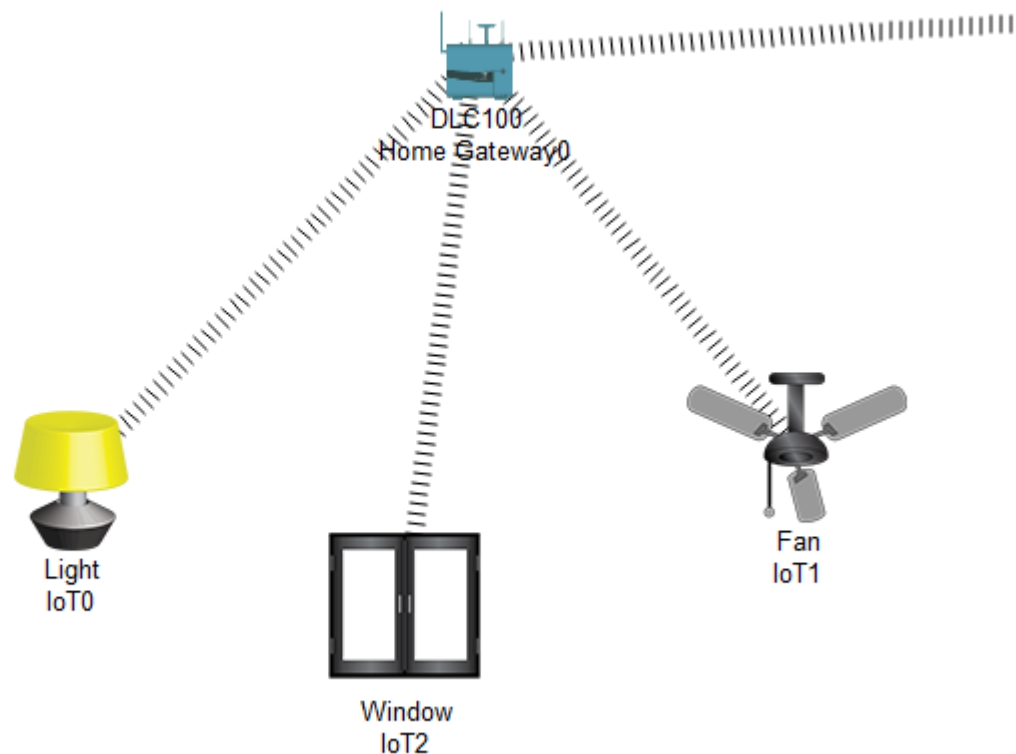
 Marwadi University Marwadi Chandarana Group	Marwadi University Faculty of Engineering and Technology Department of Information and Communication Technology	
Subject: Computer Networks (01CT0503)	Aim: Design and simulate IoT scenario.	
Experiment No: 12	Date: 14-11-2024	Enrolment No: 92200133030


Aim: Design and simulate IoT scenario. Scenario is Smart Home

Step – 1:- Take One Home Gateway

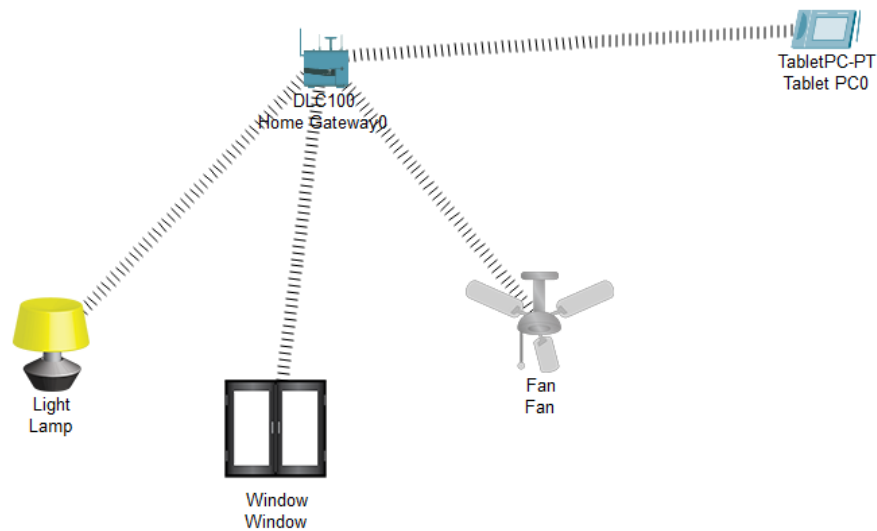


Step – 2 :- Take one Light and Ceiling Fan.

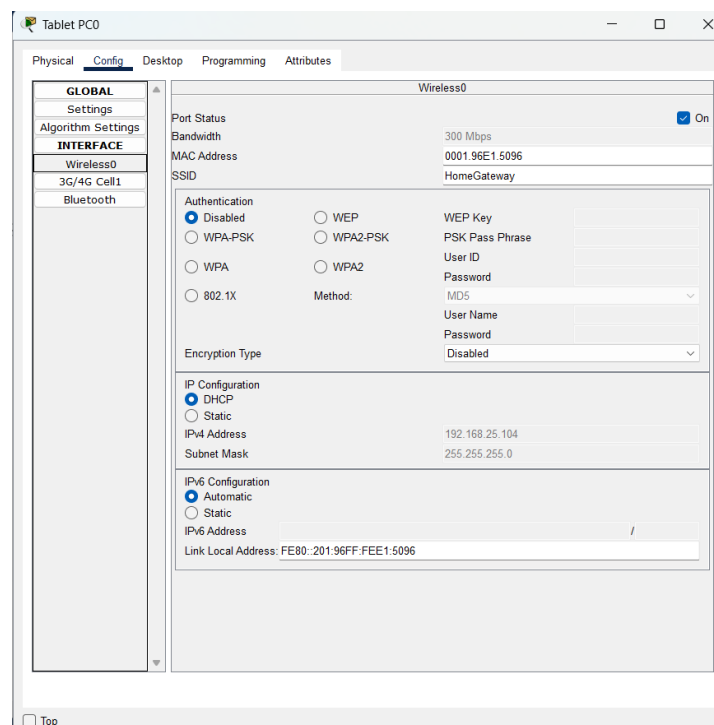



 Marwadi University Marwadi Chandarana Group	Marwadi University Faculty of Engineering and Technology Department of Information and Communication Technology	
Subject: Computer Networks (01CT0503)	Aim: Design and simulate IoT scenario.	
Experiment No: 12	Date: 14-11-2024	Enrolment No: 92200133030

Step – 3 :- Take One Tablet.

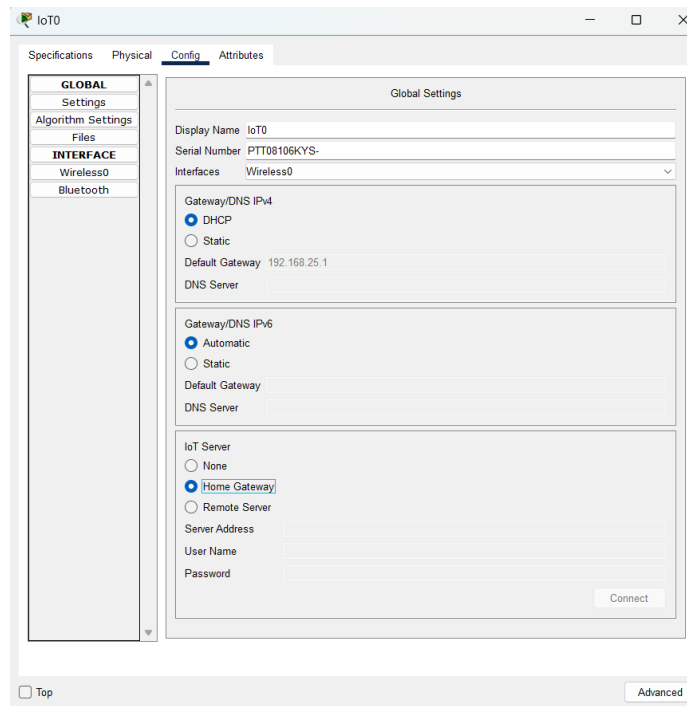


Step – 4 :- Now Configure the Tablets Wireless SSID to HomeGateway.

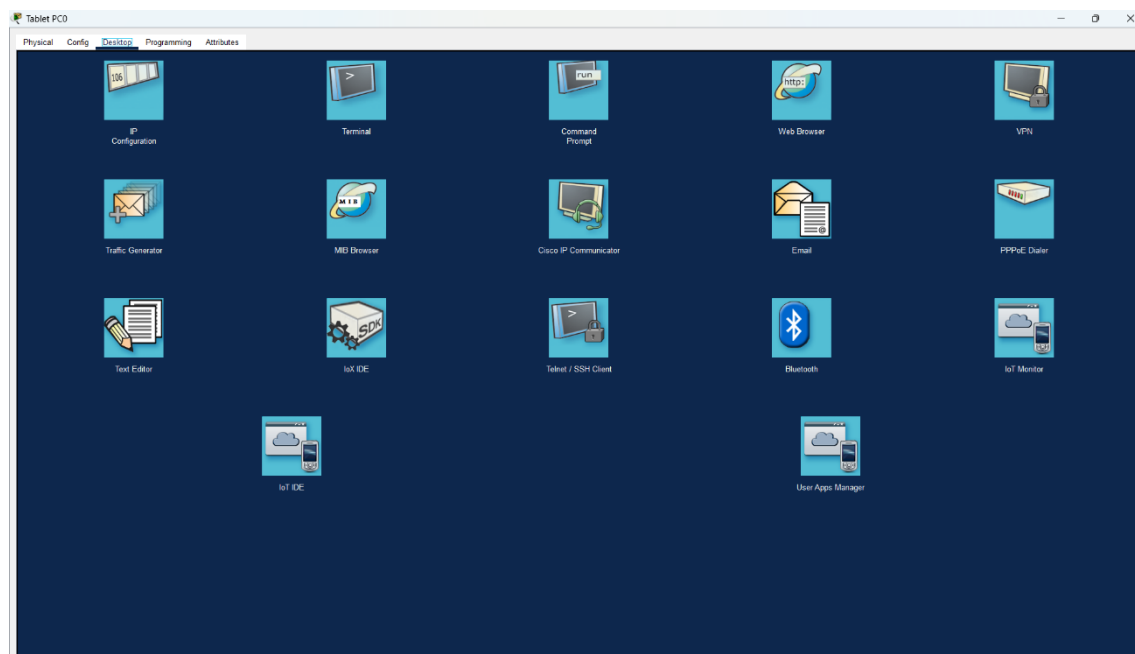



 Marwadi University Marwadi Chandarana Group	Marwadi University Faculty of Engineering and Technology Department of Information and Communication Technology	
Subject: Computer Networks (01CT0503)	Aim: Design and simulate IoT scenario.	
Experiment No: 12	Date: 14-11-2024	Enrolment No: 92200133030

Step – 5 :- Now we will Register all the devices on HomeGateway.for that go to device>config > Iot Services > Choose HomeGateway

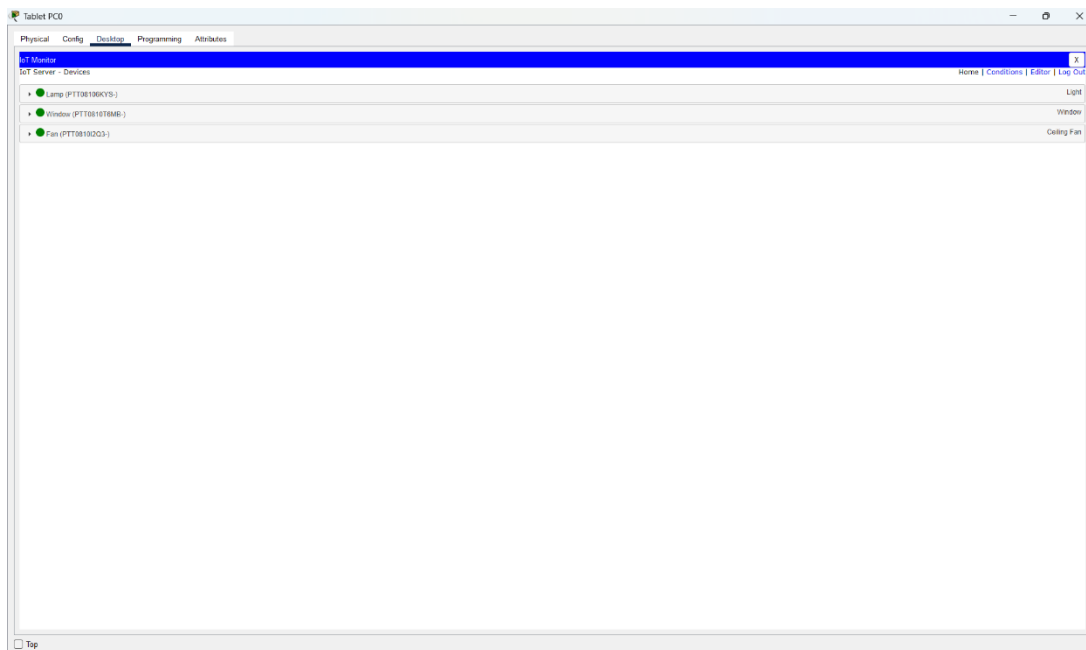


Step – 7:- Now we will Define the Condition. When the Door is Open, the Fan and Lamp should be off. when the door is closed, the Lamp and Fan are On. Go to Tablet > Desktop > Iot Monitor

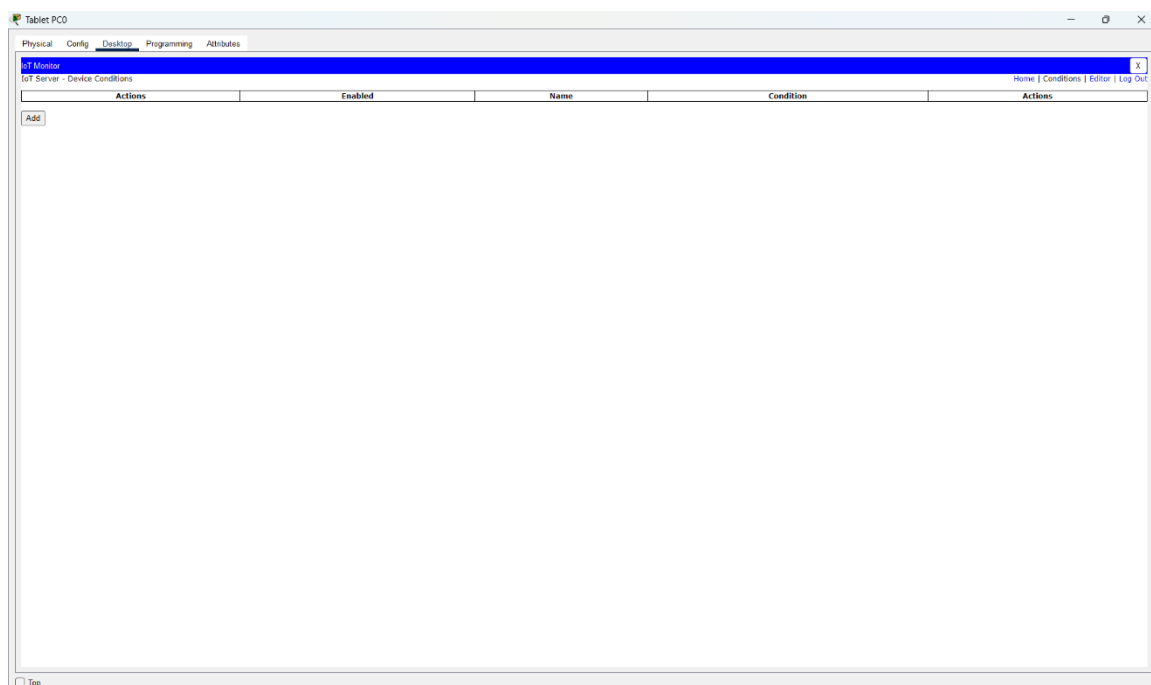



 Marwadi University Marwadi Chandarana Group	Marwadi University Faculty of Engineering and Technology Department of Information and Communication Technology	
Subject: Computer Networks (01CT0503)	Aim: Design and simulate IoT scenario.	
Experiment No: 12	Date: 14-11-2024	Enrolment No: 92200133030

Log in into it by pressing login button it will display all the registered device in this case it will be lamp , fan and door.



To add condition go to condition.



 Marwadi University Marwadi Chandarana Group	Marwadi University Faculty of Engineering and Technology Department of Information and Communication Technology	
Subject: Computer Networks (01CT0503)	Aim: Design and simulate IoT scenario.	
Experiment No: 12	Date: 14-11-2024	Enrolment No: 92200133030

this is our first condition. when window is open lamp and fan should be off.

Add Rule

Name DAYTIME

Enabled

If:

Match All

Window On is true

+ Condition

+ Group

Then set:

Lamp Status to Off

Fan Status to Off

+ Action

OK

Cancel

this is our second condition when window is close then fan and lamp should be on.

Add Rule

Name

Enabled

If:

Match All

Window On is false

+ Condition

+ Group

Then set:


Lamp Status to On

Fan Status to High

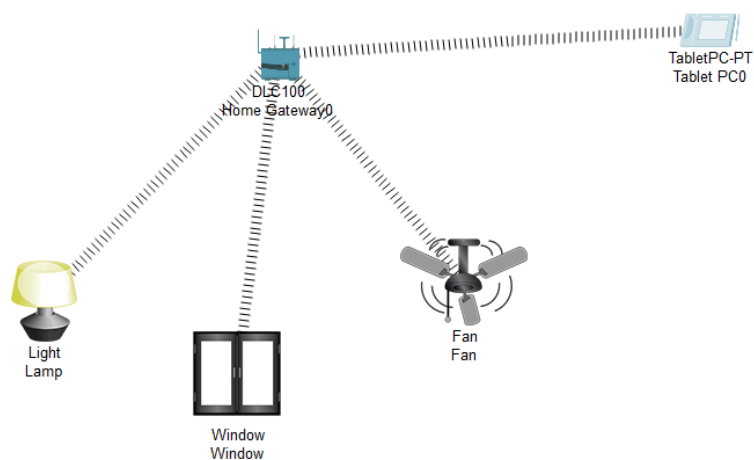
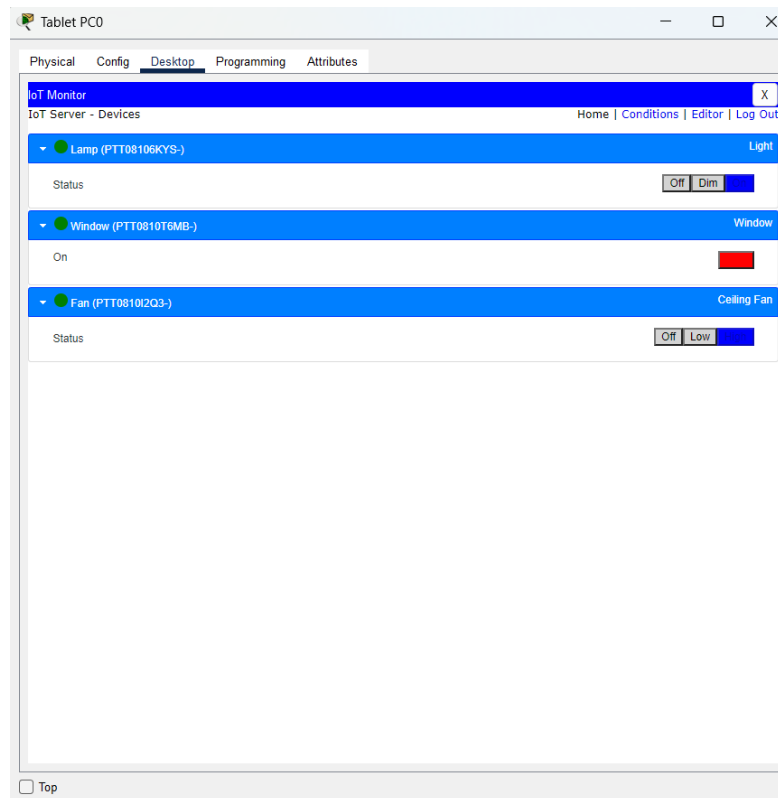
+ Action

OK


Cancel

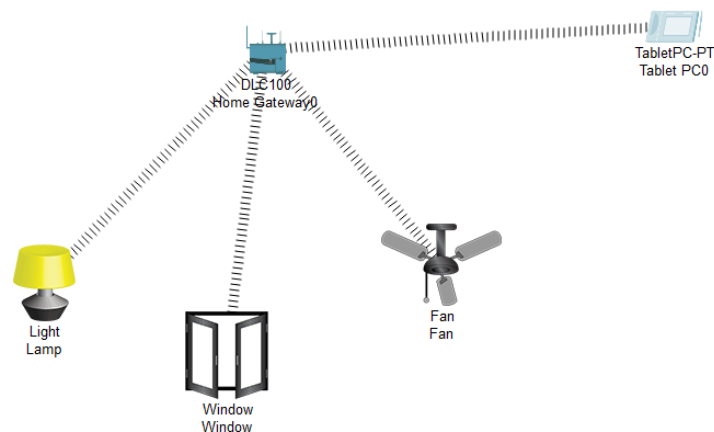
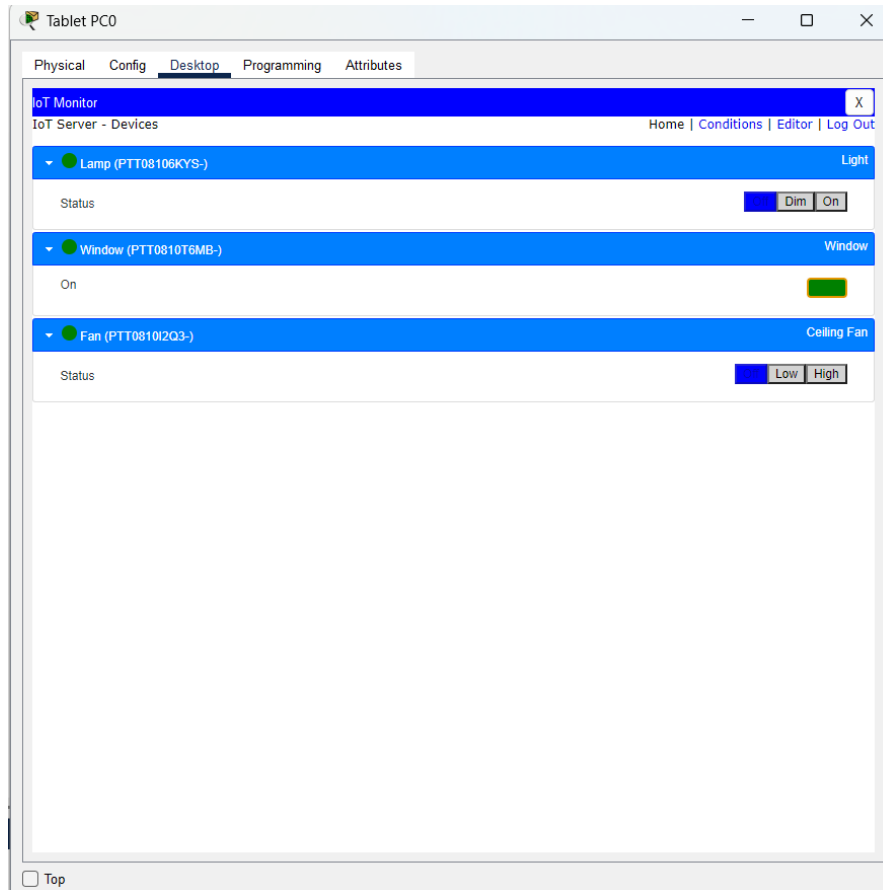
 Marwadi University Marwadi Chandarana Group	Marwadi University Faculty of Engineering and Technology Department of Information and Communication Technology	
Subject: Computer Networks (01CT0503)	Aim: Design and simulate IoT scenario.	
Experiment No: 12	Date: 14-11-2024	Enrolment No: 92200133030

Now we will Simulate our Scenario.




In the Night time when window is off fan and light is on.

 Marwadi University Marwadi Chandarana Group	Marwadi University Faculty of Engineering and Technology Department of Information and Communication Technology	
Subject: Computer Networks (01CT0503)	Aim: Design and simulate IoT scenario.	
Experiment No: 12	Date: 14-11-2024	Enrolment No: 92200133030



In the Day Time when window is open the light and fan should be off.

 Marwadi University Marwadi Chandarana Group	Marwadi University Faculty of Engineering and Technology Department of Information and Communication Technology	
Subject: Computer Networks (01CT0503)	Aim: Design and simulate IoT scenario.	
Experiment No: 12	Date: 14-11-2024	Enrolment No: 92200133030

Conclusion:-

By Performing this Scenario I learnt How Iot Devices are controlled within the same Network. I learnt how to register a device on tablet. How set SSID , how to add conditions. and Learnt to simulate it.