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| KSU_logo.jpg | **King Saud University**  **College of Computer and Information Sciences**  **Department of Computer Science** |

**CSC 220: Computer Organization**

**Labwork - # 1**

**Student Name: ID:**

1. **Introduction**

Today we have learned how to operate with Logisim S/W and drawn there basic gates AND , OR and not in Logisim.

1. **Experiments**

Diagram

Description automatically generated with medium confidence

Diagram

Description automatically generated with medium confidence

Video for my work: <https://youtu.be/Mr3-XuLyn1Y>

1. **Results**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| X | Y | F=x.y | F1=x+y | F2= x' or ͞x |
| 0 | 0 | 0 | 0 | 1 |
| 0 | 1 | 0 | 1 | 1 |
| 1 | 0 | 0 | 1 | 0 |
| 1 | 1 | 1 | 1 | 0 |

1. **Discussion**

In case of AND gate, any one input is 0 we will get the output is 0 otherwise we will get 1.‎

In case of OR gate, any one input is 1 we will get the output is 1 otherwise we will get 0 if ‎all of them are 0.‎

In case of NOT gate, output is just reverse of the input.‎