**NETWORKING PRINCIPLES LAB 5 REPORT**

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**8.2.7 Use a calculator for Binary Conversions**

**Part 1: Using Windows Calculator**

Step 1(a)

A black and white sign with white text

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A screenshot of a calculator

Description automatically generated

(b)

A black and white sign with white text

Description automatically generated

A screenshot of a calculator

Description automatically generated

**Step 2**

(b)

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A black and white text

Description automatically generated

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(c)

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A black and white rectangular sign with white text

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(d)

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**Part 2: Binary system**

(e)

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(f)

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(g)

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A screenshot of a calculator

Description automatically generated

**Step 2:**

**Convert the following decimal numbers to binary.**

A screenshot of a calculator

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A screenshot of a calculator

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**Convert the following binary numbers to decimal.**

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A screenshot of a calculator

Description automatically generated

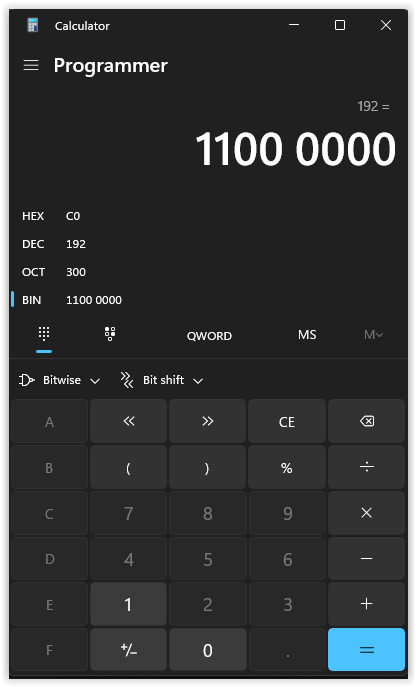
**Part 3: Network Addresses**

**Step 1(a)**

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Description automatically generated

(b) **Convert the 4 parts of the IP address 192.168.10.2 to binary.**



A screenshot of a calculator

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A screenshot of a calculator

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**Step 2**

**Convert the 8 possible decimal subnet octet values to binary.**

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**Convert the four parts of the subnet mask 255.255.255.0 to binary.**

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A screenshot of a calculator

Description automatically generated

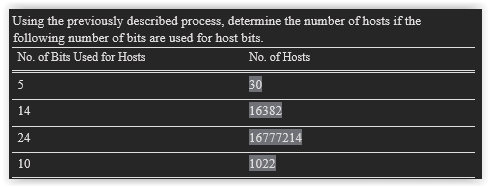
A screenshot of a calculator

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**Step 3(b)**



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A screenshot of a calculator

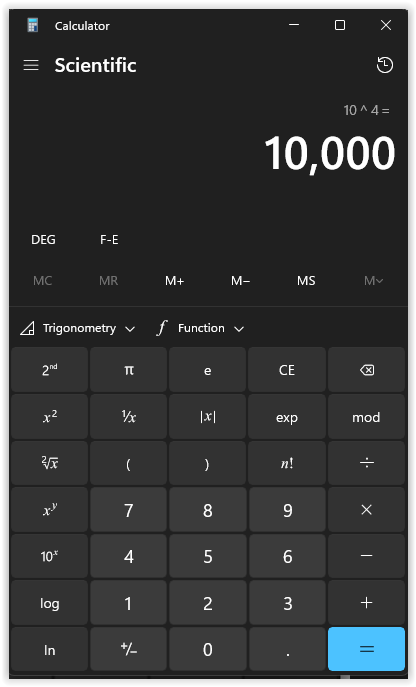
Description automatically generated

A screenshot of a calculator

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A screenshot of a calculator

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**9.25 Packet Tracer–Configure DHCP on a Wireless Router**

**Part 1: Set Up the Network Topology**

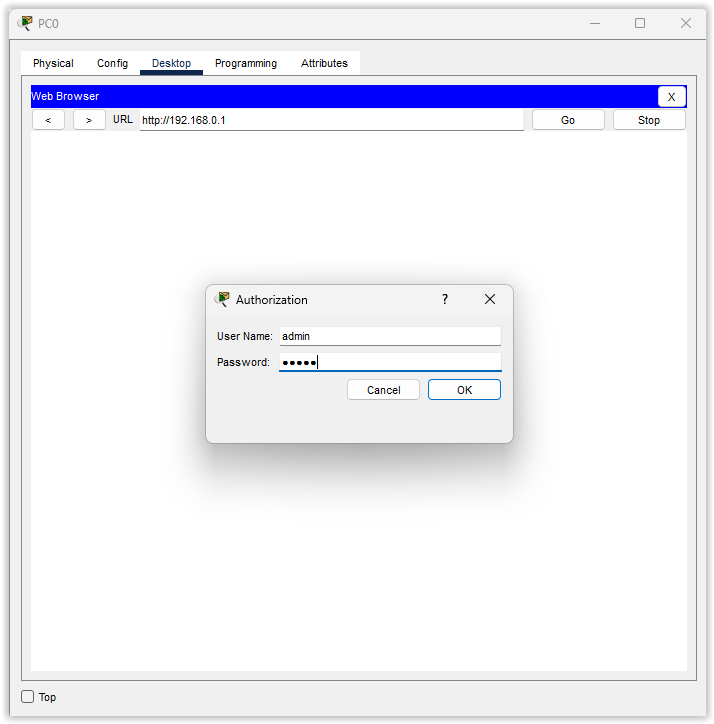
A diagram of a computer network

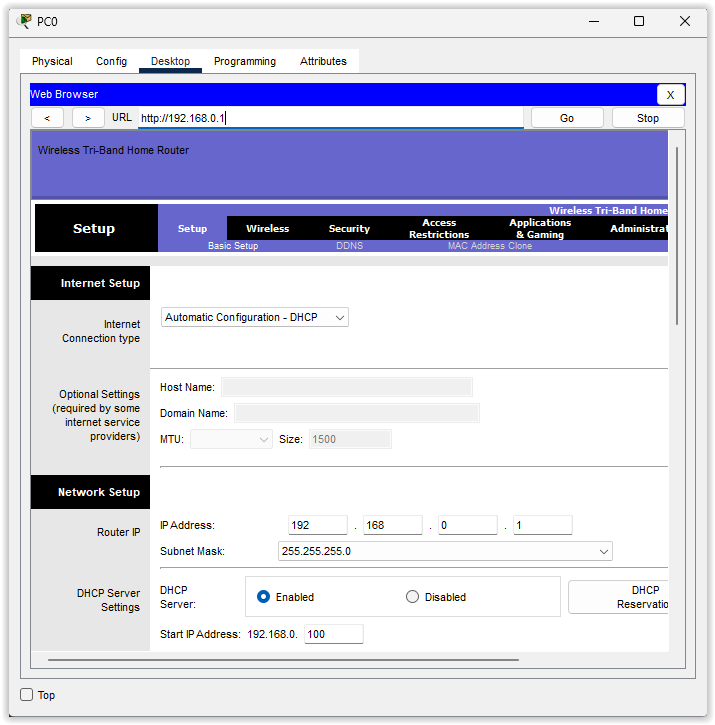
Description automatically generated

**Part 2: Observe the Default DHCP Settings**

A screenshot of a computer

Description automatically generated



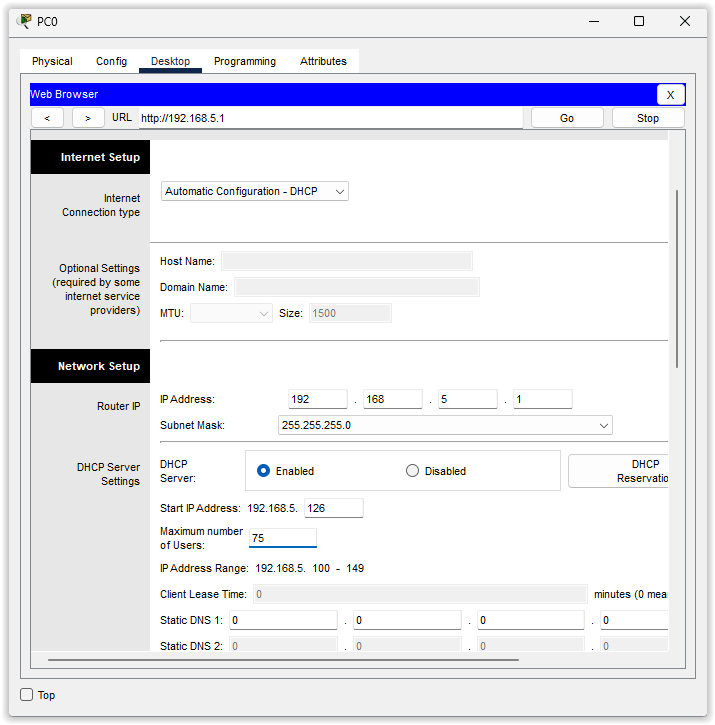


**Part 3: Changing the IP address of the router.**

A computer screen shot of a computer

Description automatically generated

**Part 4: Change the Default DHCP range of address.**



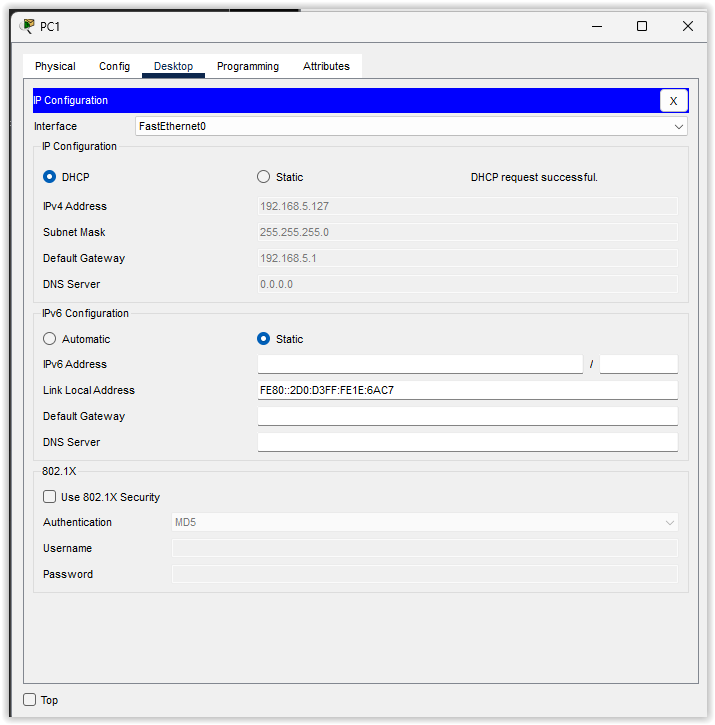
A screenshot of a computer

Description automatically generated

A computer screen shot of a program

Description automatically generated

**Part 5: Enable DHCP on other PCs.**



A screenshot of a computer

Description automatically generated

**Part 6: Verify the connectivity.**

A computer screen shot of a black screen

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A computer screen shot of a black screen

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A computer screen shot of a program

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A computer screen shot of a program

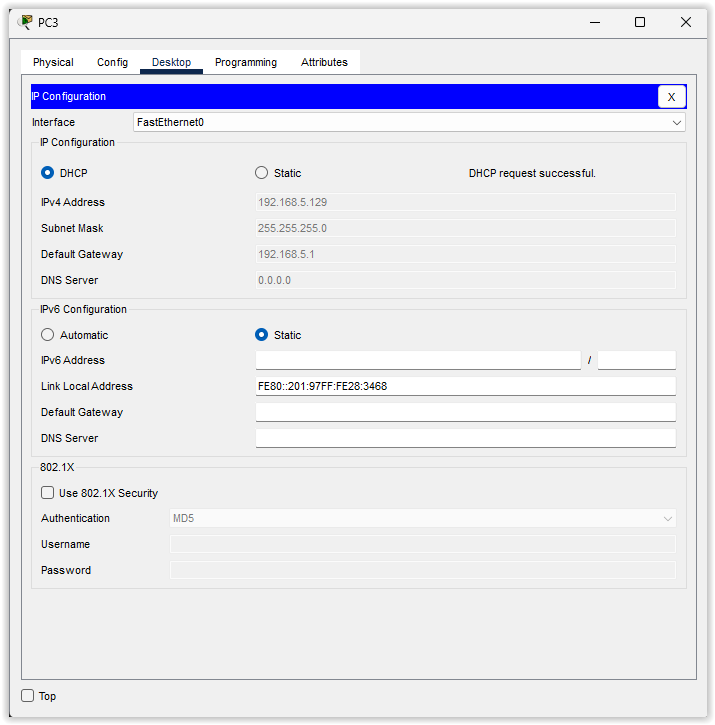
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**9.2.5 Packet Tracer–Configure DHCP on a Wireless Router**

**Part 1: Examine the Configuration for Accessing External Network**

A computer network diagram with words

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A screenshot of a computer

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**Part 2: Examine the Configurations for Accessing the Internal Network**

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**Part 3: Connect 3 PCs to the Wireless Router**

A computer network diagram with words

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**Part 4: View NAT Translation Across the Wireless Router**

A screenshot of a computer

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**Part 5: View the Header Information of the Packets that Traveled Across the Network**

**Inbound PDU details**

A screenshot of a computer

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**Outbound PDU details**

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