



The ISP provides your company with a block of IP addresses in this format: 128.32.64.96/29. Give the IP address of each server and the main gateway in both decimal and binary format.

IP Block from ISP (binary)	IP Block from ISP (decimal)
<u>10000000.00100000.01000000.01100xxx</u>	128.32.64.96/29

We need 3 bits to assign IP addresses to 8 machines, because $2^3 = 8$.

Machine	IP (binary)	IP (decimal)
Main gateway	<u>10000000.00100000.01000000.01100000</u>	128.32.64.96
Server 1	<u>10000000.00100000.01000000.01100001</u>	128.32.64.97
Server 2	<u>10000000.00100000.01000000.01100010</u>	128.32.64.98
Server 3	<u>10000000.00100000.01000000.01100011</u>	128.32.64.99
Server 4	<u>10000000.00100000.01000000.01100100</u>	128.32.64.100
Server 5	<u>10000000.00100000.01000000.01100101</u>	128.32.64.101
Server 6	<u>10000000.00100000.01000000.01100110</u>	128.32.64.102
Server 7	<u>10000000.00100000.01000000.01100111</u>	128.32.64.103